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IN THIS ISSUE:

NTIA Seeks to Curtail Use of Out-of-band Frequencies by Broadcasters NASB Submits Proposal for Future Shortwave Bands Messer Leaves IBB for DRM Valencia HFCC Report Hurricane Wilma Strikes Two NASB Members in Florida
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NTIA Seeks to Curtail Use of Out-of-band Frequencies by Broadcasters

The Office of Spectrum Management of the National Telecommunications and Information Administration (NTIA) sent a letter to the International Bureau of the FCC on Sept 29, 2005. The letter cites three instances of interference from private shortwave broadcasters in the last 12 months dating back to Nov 2004. The NTIA letter lists 115 Federal Fixed and Mobile Service frequencies in the shortwave bands.

The NTIA sent the letter to the FCC on behalf of the Federal Emergency Management Agency (FEMA). FEMA owns, operates and maintains a very large high frequency radio system known as the FEMA National Radio System (FNARS). The NTIA letter asserts that the receivers in the FNARS HF network use current technology and still receive interference from shortwave broadcasters operating 13 kHz away from the FEMA frequency. The letter requests that the FCC immediately remove from the broadcast schedule any frequency located plus or minus 13 kHz from the listed FEMA frequencies. The combined spectrum identified for protection by NTIA in the letter totals over 2000 kHz.

The FCC has authorized private broadcasters on select out-of-band frequencies on a non-interference basis for many years. Broadcasters recognize they must quickly vacate the frequency in the event of actual interference and have promptly done so when asked by the FCC. The NTIA contends that interference, when it occurs, cannot be resolved in a timely manner.

Licensees learned of the NTIA letter after the B05 schedule had been finalized and many broadcasters had already printed and distributed their frequency schedules expected to go into effect on October 30, 2005. The FCC International Bureau is in the process of evaluating the letter and talking to NTIA and FEMA. The FCC will issue instructions to licensees when a decision is reached.

If the NTIA / FEMA request is granted by the FCC, it would displace 120 hours of broadcasts by 14 private shortwave licensees. The three broadcasters with more than 20 hours in jeopardy are EWTN Global Catholic Radio, Family Radio and World Harvest Radio.

Some of the licensees scrambled to find new frequencies before B05 went into effect. Those that chose not to change, but to wait for the outcome of the FCC decision, were authorized those frequencies under the following condition in their B05 authorizing letter:

"In addition, we note that the National Telecommunications Information Administration has requested that some of the out-of-band frequencies be removed from the Commission's HF Broadcast Schedule. (See attached letter) The Commission is still evaluating this request, however, you are on notice that you may have to vacate certain frequencies depending on the outcome of this request."

NASB SUBMITS PROPOSAL FOR FUTURE SHORTWAVE BANDS

Planning has already begun for the World Radiocommunication Conference 2007, and the official U.S. proposals are now being discussed. One of the items on the agenda is the need for more spectrum for HF broadcasters between 4 and 10 MHz. The NASB has introduced a draft proposal to the FCC's IWG-4 advisory group that was received well as a starting point and has been "tabled" for further comment. The proposal is favorable to HF broadcasters by suggesting a 700 kHz addition to the broadcasting service spectrum between 4 and 10 MHz. The planning group will eventually have to come to grips with two very different proposals -- the NASB proposal and a separate proposal from the NTIA (the government's National Telecommunications and Information Administration) which calls for no additional spectrum for broadcasters.

At the Nov 9th meeting, Globe Wireless submitted a draft proposal that substantially mirrored the earlier NTIA proposal opposing band expansion. After additional discussion, it was determined that a compromise draft would be developed for the January 2006 IWG-4 meeting that will seek "harmonization" between the differing draft proposals.

NASB representative Don Messer was chosen to draft the compromise proposal. It has now been completed and will shortly be submitted to IWG-4. The compromise is structured to take into consideration the concerns of fixed services users, but still to give the broadcasters additional primary allocations. In short, it reduces the broadcast allocation to 350 kHz, all of which is co-primary with existing fixed service allocations. It means sharing of frequencies by fixed and broadcasting stations -- something that is normally shunned in theory, but there is also

a section that suggests a footnote for times of emergency.

Had the NASB not been an active participant in these recent IWG-4 meetings, it is highly likely that the idea of band expansion for broadcasting would already be dead. The NASB will continue to be actively involved in the IWG-4 meetings as events move toward the preparation of recommendations to the WRC-07 Advisory Committee.

NASB attorney Ed Bailey has been attending the planning meetings in Washington, and recently Dr. Donald Messer has come on board as an NASB representative to these meetings as well. Don recently retired from NASB associate member IBB (the U.S. International Broadcasting Bureau) and is now working full-time with the Digital Radio Mondiale (DRM) Consortium as Chairman of the Technical Committee.

Don Messer received his doctorate from The Johns Hopkins University in applied math and physics, after having received an MS degree from Cornell University in theoretical physics and a BS degree in engineering physics from New York University (magna cum laude).

At the Voice of America (IBB), he was a main driver for the introduction of digital radio, both via satellite and terrestrial means. In the International Telecommunication Union's (ITU) radiocommunication unit, Don was the chairman of the Conference Preparatory Meeting's preparation for all of the World Radio Conference 2003 (WRC-03) agenda items dealing with the use of shortwave frequencies, and he was the international chairman at WRC-03 for three of the shortwave agenda items.

NASB President Doug Garlinger said the Association is very pleased to have Don Messer working on our behalf. "Don is the right person at the right time to be representing us at these important HF planning meetings which could have a profound impact on the future of shortwave broadcasting."

Messer Leaves IBB for DRM

by Leslie Stimson

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WASHINGTON Dr. Donald Messer has retired from the International Broadcasting Bureau to work full-time with the Digital Radio Mondiale Consortium, an organization of broadcasters and manufacturers in several countries that promotes a technology to migrate shortwave, medium-wave/AM and now FM to digital.

The IBB intends to fill Messer's position and continue to participate in the DRM Consortium and the ITU.

The bureau provides engineering and administrative support for U.S. government-funded, non-military international broadcast services such as Voice of America and Radio Martí. Formed in 1994, it formerly was part of the U.S. Information Agency. IBB and its governing body, the Broadcasting Board of Governors, were established as independent federal government entities when USIA was disbanded in 1999.

Full-time digital

Messer's move expands what has been a part-time endeavor among his IBB duties to a full-time role with compensation. He remains chairman of the consortium's Technical Committee and a member of the steering board and strategic planning group.

Messer has also been the test coordinator for any country that wants to evaluate DRM.

DRM has test agreements with Mexico and Brazil. Tests in Mexico were to be completed in July, he said, with the 26 MHz results to be submitted to the consortium by September, to be followed later in the year for the medium-wave/AM results.

"The Brazil work should start this fall, but the test plan schedule is not yet fixed," said Messer. "We have also received inquiries about testing of this sort from other countries. Along these lines, tests continue in Russia and China, as well as in many countries in Europe and in Kuwait."

Additional countries represented by DRM members include Italy, Germany, France, Sweden, Spain, Japan, Canada and the United Kingdom.

On this continent, Messer has scaled back his role with the National Radio Systems Committee. He has resigned as co-chairman of the DAB Subcommittee's standardization working group, to avoid the appearance of a conflict of interest in his DRM role.

Sony's Paul Feinberg remains co-chairman of this group; Dom Bordonaro, chief engineer for Cox Radio in Connecticut, is the new co-chair.

"This group still has a lot of work to do, Advanced Data Applications being the most important one," said Messer, who added he will continue to attend meetings as an observer.

Aerospace and Government

Messer had been with IBB for 20 years. He left IBB in May as director of the Spectrum Management Division.

He held a variety of engineering positions earlier in his career. After graduating from New York University with a Bachelor of Science in engineering physics in 1952, Messer went on to get his Master of Science from Cornell in theoretical solid-state physics and a doctorate from Johns Hopkins in operations research.

He spent several years in the aerospace industry in advanced development and applied research. In 1971-81 he was president of Messer Associates, a technical and management consulting firm later acquired by Dynamac.

In his IBB role, he was the Broadcast Satellite Program manager at the USIA's Voice of America. There, he helped lead to fruition what is now called satellite digital radio, according to a 1996 FCC filing by Messer and others evaluating pioneer preferences.

In the late 1960s, some U.S. and European broadcast groups began analytic work for what would become communications satellites capable of transmitting audio programs to fixed, portable and mobile receivers. The European Broadcast Union, Voice of America and NASA conducted this early work, which increased in the 1970s and '80s with the development of more powerful satellite transponders.

In 1988, the U.S. government became interested in satellite radio for diplomacy purposes and directed the National Security Council to look into it. It did so, and the government directed delegates to the World Administrative Radio Conference to begin working towards frequency allocation for satellite digital radio.

In 1990-91, VOA, under Messer's guidance, and NASA, funded and directed the Jet Propulsion Lab on a series of tests, including a demonstration in Washington with what was the forerunner of a transmit/receive system for use with either L-band or S-band spectrum.

Messer was a key U.S. delegate at the 1992 WARC that led to the S-band allocation for satellite digital radio in this country and L-band overseas for testing a satellite component with the Eureka-147 DAB system. In 1990, the FCC received its first application for satellite digital radio from Satellite CD Radio.

In 1996, he was one of the experts the FCC called to review spectrum applications for the original satellite applicants, to determine whether they qualified for a "pioneer's preference" for spectrum. The experts said no.

The applicants for the spectrum were Primosphere; DSBC; Satellite CD Radio, which became Sirius Satellite Radio; and American Mobile Radio Corp., which became XM Satellite Radio. Eventually two licenses went to the highest bidders at auction.

Around 1996, Messer recalled, the NRSC tested the VOA/JPL experimental satellite system, and he had the idea to apply the techniques to shortwave broadcasting.

"We did some work on this, and during that time I got involved with what has evolved into DRM." He became the chairman of the DRM Technical Committee in 2000.

HFCC PLENARY MEETING MINUTES –VALENCIA, SPAIN; 22nd – 26th August 2005

The HFCC/ASBU co-ordination conference for the Wintertime 2005 (B05) season was hosted by Radio Nacional de Espana (RNE) at the Museo Principe Felipe in Valencia Spain between 22nd–26th August 2005.

One hundred twenty-five delegates representing 64 organizations from 40 countries attended the conference, which was opened on Monday, 22nd August 2005 by Jose Maria Huerta, Technical Director of Radio Nacional de Espana. Mr. Huerta said he was pleased to be able to welcome all delegates to Valencia and to the first HFCC/ASBU conference to ever be held in Spain. Mr. Huerta thanked the Generalidad Valenciana and the Diputación de Valencia as well as the other sponsors for their invaluable support for the conference. Jose Maria Huerta said he wished all delegates a successful conference and hoped that they would find time to see something of the beautiful and historical city of Valencia.

On behalf of all the delegates, HFCC Chairman Oldrich Cip thanked Jose Maria Huerta for the warm welcome to Valencia. Oldrich said that the conference in Valencia was the 30th since the first working meeting of the HFCC in Prague in 1991. Given that history, it seems almost overdue that only recently has the HFCC become a regular member of the Radio Sector of the ITU in the category of international and regional organizations, side by side with the Member Countries, International Broadcasting Unions, and other important organizations. The HFCC membership was approved by the 2005 session of the Administrative Council of the ITU.

Oldrich said that the ITU membership comes at a time when the forum of the Union is taking up the long-debated issue of the shortage of radio spectrum for broadcasting, especially in the bands below 10 MHz, and the HFCC now has the opportunity to take part as an independent Radio Sector Member in the study groups, working parties, expert groups and other assemblies of the Sector. This includes the work that is in progress during the present preparatory phase leading up to WRC 07. Oldrich warned that there are strong opponents against any enlargement of the HF broadcast bands and the outcome of the WRC 07 agenda item that is our main preoccupation remains uncertain. The debate frequently hinges on the spectrum requirements reflected in the HFCC seasonal databases. Those opponents have made good use already of the remaining inaccuracies that were found in the schedules of some of our HFCC/ASBU members and they questioned the legitimacy of any HF spectrum enlargement. Therefore, all members are urged to upload each and every one of their requirement changes in order to maintain a 100% accuracy of their schedule information contained in the database.

Oldrich Cip said that he would like to endorse Jose Maria's thanks to the various sponsors of the conference. Firstly the local hosts, the Generalidad Valenciana and the Diputación de Valencia and secondly the companies of TCI International, Continental Electronics, Telefunken, Thales, Altel Systemas and Ibérica de Componentes, the latter two both from Spain. A very impressive list of sponsors without whose support the conference amenities would have been far more modest.

Report of Second Plenary Meeting; Thursday, 25th August 2005

The deadline for the submission of final B05 conference requirement data was agreed to be Wednesday, 31st August. Thursday, 6th October 2005 was agreed to be the deadline date for the submission of final requirement data for inclusion in the B05 Operational Schedule.

A06 Conference

Oldrich Cip confirmed that the A06 conference would be the next joint HFCC/ASBU and ABU-HFC conference and would be hosted by the ABU and RTC (China Radio and Television) between 13th-17th February 2006. The venue for this joint conference will be Hainan Island in southern China. Thursday, 5th January 2006 is the deadline for submission of requirement data for inclusion in the initial A06 schedule.

Later Ms. Wang Fang of RTC gave a brief presentation on the amenities available on Hainan Island, which is a holiday island with excellent hotel and conference facilities and a very pleasant temperature in February. Wang Fang said that the conference would be held in Sanya City in the south of Hainan Island and connecting flights to Phoenix airport, that is situated about 35 minutes distant by taxi, are available from Hong Kong, Beijing or Shanghai. Details of available hotels and rates will be provided by RTC as soon as possible, but delegates should bear in mind that February is high season in Sanya City.

Future Conferences

HFCC Vice Chairman Horst Scholz asked if there were any volunteers amongst the organizations present who could host a future conference. There were no such volunteers. Horst said that the Steering Board appreciated the difficulties of hosting an HFCC/ASBU conference. Nevertheless no host meant no conference. Horst pointed out that there were still some of the larger organizations that had not hosted an HFCC/ASBU conference. Therefore, the Steering Board would be liaising with each of those organizations in order to try to persuade each of them to host a conference in the very near future. Hopefully one or another of those organizations could be the host for the B06 conference.

Reports of HFCC Working & Discussion Groups

Monitoring & IRUS Groups

Oldrich said that ITU working groups have been monitoring the HFCC database to assess its accuracy. However, that activity had now ceased and the accuracy of the HFCC database was now generally accepted. While that was good news, it was even more important for members to ensure that their requirement details entered into the database were completely accurate. This applied particularly to those FMOs who maintained some spare or "wooden" requirements in the database. Oldrich Cip said the information in the post conference B05 database should be accurate by the deadline date of 31st August 2005. Although it was accepted that co-ordination would continue after that date, by the operational schedule deadline date of 6th October all requirements in the database should be real. Oldrich said that in those instances where two or more FMOs have unresolved collisions and/or doubts about the viability of particular frequency shares, then the monitoring group could lend assistance by providing current monitoring of the situation from two or more independent sources. The ABU-HFC have a similar monitoring project and so there can now be a valuable exchange of monitoring information between the HFCC/ASBU and ABU-HFC.

Arto Mujunen (IBB), Head of the IRUS Sub-Group reported that the IBB will make five Palm computers available for use by HFCC/ASBU members, who wish to take an active role in future IRUS monitoring exercise and who will provide their monitoring data to the IBB using one of those Palm computers. Arto reported that the IBB are to set up an IRUS web page and that in future IRUS monitoring campaigns would include DRM transmissions once cheaper DRM receivers become available.

Group of Experts

Serious interruptions to the internet connection occurred during the first few days of the conference and were the direct result of viruses being present on the laptop computers of certain delegates. Considerable time and effort was spent identifying the computers causing the problem. The following measures need to be taken to avoid similar problems occurring at future conferences:

- * All delegates must ask their IT Department to set up on their laptop virus protection software that automatically updates on a daily basis;
- * All delegates must ask their IT Department for a Windows update on their laptop immediately prior to the conference;
- * It is not always possible to identify the name of each computer. Therefore, all delegates should ask their IT Department to include the name of their organization as a part of the computer name. Prior to the start of the next conference all delegates should advise the Secretariat of the modified name of the notebook that they will use at the conference;
- * In the internet firewall used at the next conference most ports will be closed. Only those ports needed to access the HFCC web site and server will be left open. Any other ports that are required for access to other relevant areas may be opened on request and at the discretion of the Secretariat.

DRM

Currently DRM data published by the HFCC is not sufficiently accurate. To improve the accuracy of that DRM data the following measures will be adopted:

- * All occasional DRM requirements should be submitted with their actual operational dates rather than be submitted for a complete season. In addition, any and all changes to those operational dates required during a season should be submitted immediately;
- * Currently DRM requirement data from the tentative seasonal schedule is published. This practice will cease and only the DRM requirements within seasonal operational schedules will be publicised;
- * In practice it has not been possible to gather the complete data for longwave and mediumwave DRM transmissions. In addition, the HFCC database does not contain the details of some local 26 MHz transmissions operated by non-HFCC organisations. Therefore, in future the HFCC DRM database will exclude details of LF, MF and local 26 Mhz transmissions and will be limited to data on DRM transmissions operated by HFCC/ASBU and ABU-HFC member organisations.

Currently discussions are taking place, both within and outside the broadcast community, about the possibility of grouping DRM transmissions together in designated parts of the HF broadcast bands because such an arrangement is believed to be more spectrum efficient. There are a number of reasons why such an arrangement would not be easy to achieve in practice:

- * Setting aside parts of the HF bands for DRM only transmissions would sterilize those parts of those bands in areas of the world where DRM is not used currently. Consequently, such an arrangement would be less spectrum efficient;

- * Nevertheless, it is sensible to try to group DRM transmissions together as much as possible because DRM transmissions have a lower mutual interference potential than do DRM transmissions towards some analogue transmissions;

- * Those HFCC/ASBU member organizations with long running DRM requirements on air are encouraged to consult each other and study the possibilities of grouping such transmissions together.

FMO & Broadcaster Codes

During this conference one FMO code was changed, the Austria Broadcasting Services (ORF) was changed to ORS. The broadcaster code remains ORF. A new FMO code RTB was introduced for Radio-Television Belge De La Communaute Francaise (RTBF) from Belgium. CVI (Christian Vision) as FMO will use CVC as the common single broadcaster code for all the broadcasters for whom CVI frequency manage.

Preparations for WRC-07

At their meetings in March/April 2005, ITU-R Working Parties 6E, 8A, 8B and 9C prepared draft CPM text in response to WRC-07 Agenda Item 1.13 (taking into account Resolutions 729 (WRC-97), 351 (WRC-03) and 544 (WRC-03), to review the allocations to all services in the HF bands between 4 MHz and 10 MHz, excluding those allocations to services in the frequency range 7 000-7 200 kHz and those bands whose allotment plans are in Appendices 25, 26 and 27 and whose channeling arrangements are in Appendix 17, taking account of the impact of new modulation techniques, adaptive control techniques and the spectrum requirements for HF broadcasting).

A Co-ordination Group was formed to prepare a consolidated text, a copy of which can be found on the HFCC website for information. The results were issued as Document WP8B-194 that will be available on the HFCC website. This text will be improved at the next block ITU-R meetings to be held in September-November 2005. The deadline for completed CPM text is September 2006, so that last opportunity to improve the text in ITU-R Working Parties will be March/April 2006. CPM-07 is currently scheduled to meet from 15th-17th March 2007 to finalize the CPM Report to WRC-07.

Issues and Outstanding Work

Monitoring of one broadcast band during busy hours demonstrated the joint operational database of the HFCC/ASBU/ABU-HFC to be at least 95% accurate. Consequently, the statistics derived from the HFCC/ASBU/ABU-HFC operational database are accepted as valid now by non-broadcast services. Nevertheless, those non-broadcast services point out that a number of broadcasters have recently closed their HF services and some have stated publicly that they believe HF broadcasting to be dead or dying. This raises the question of whether additional spectrum is really needed by the broadcasting service in around 10-years time when any additional spectrum allocated to the broadcasting service by WRC-07 is likely to become available. Although statistical analysis confirms the requirement of an overall additional 250 kHz - 800 kHz of HF spectrum for the broadcasting service, the actual amounts of additional spectrum in the various HF bands still has to be determined. This task needs to be completed before the next ITU-R meetings to ensure this gets into the CPM Report.

Other services and some administrations are opposed to the consideration of additional HF spectrum for the broadcasting service if those other services lose access to existing allocations of spectrum. A key element leading to a possible solution is more sharing of spectrum between services as many are moving to new and improved modulation techniques. Geoff Spells of VT Communications said the EBU has developed a questionnaire that will be distributed to EBU members requesting information on the likely future spectrum requirements for broadcasting. Horst Scholz said that the HFCC had made this questionnaire produced by WP6E available to all HFCC/ASBU members. (The NASB has made this questionnaire available to all of its members as well, and it was published in a recent edition of the NASB Newsletter.)

Participation by Broadcasters

Geoff Spells pointed out that very few broadcasters attend any meetings to support the need for additional HF spectrum. Even WP6E has become dominated by administrators and representatives from other services rather than by broadcasters. Therefore, all HFCC/ASBU and ABU-HFC broadcasters are urged to consider attending as many international meetings as possible to support the need for additional broadcasting spectrum in the range 4-10 MHz.

Steering Board Elections

Horst Scholz reported that the HFCC Steering Board was proposing the following changes to the system of elections for SB posts:

* That the regular elections for the two relevant SB posts up for election should take place at two yearly intervals rather than at the current three yearly intervals. This would have the effect that members would have an opportunity to review the occupancy of each SB post every four years rather than every six years;

* That in the event that any SB office becomes vacant at any time for whatever reason, that office shall be available for re-election at the next viable, regular plenary meeting. This shall apply even if that meeting is one at which other SB posts are available for re-election in accordance with the normal cycle of elections. This change was necessary to cover such eventualities as that now facing the SB and members since Dennis Thompson would resign from the post of Rapporteur after the A06 conference when his contract with VT Communications comes to an end.

There were no objections to these proposed changes and both changes were adopted unanimously. Horst Scholz reminded members that this meant that elections for the Chairman, Systems Development Co-ordinator and Rapporteur SB offices would be held during the A06 joint conference.

New Members & Observers

Horst Scholz said that the SB had received three applications for HFCC/ASBU membership. The State Committee for Radiofrequencies of the Republic of Uzbekistan (SCR) has applied for membership of the HFCC/ASBU in order to co-ordinate HF frequencies for shortwave broadcasting in the Republic of Uzbekistan. There were no objections to this proposal and the SCR application for membership was approved unanimously.

Spaceline Ltd. of Sofia, Bulgaria provides shortwave transmission services for several broadcasters and has applied for membership of the HFCC/ASBU in order to co-ordinate the HF requirements of those various broadcasters. However, the SB has received a letter from the Communications Regulation Commission of Bulgaria that raises certain issues relevant to the membership application by Spaceline Ltd. Given those issues, the SB recommended that consideration of the Spaceline application be postponed until the SB had investigated those issues with the Communications Regulation Commission of Bulgaria. Consequently, Spaceline will maintain their Observer status until further consideration of their application at the A06 plenary meeting in Hainan.

Radio-Television Belge De La Communaute Francaise (RTB) is introducing a new HF service and has applied for membership of the HFCC/ASBU so that they can co-ordinate their future HF usage with HFCC/ASBU members. Given that the frequency management for RTB would be undertaken by Hector De Cuyper (who formerly conducted frequency management for VRT), Horst proposed that the RTB membership application be considered now rather than after attending as an Observer. Horst asked whether there were any objections to his proposal. There were no objections to this proposal and the RTB application for membership was approved unanimously.

Announcements from Member Organizations

Geoff Spells advised that he had retired from full time employment with VTC at the end of May 2005 and that he will now act as a contractor for VTC on HFCC and WRC07 matters. Consequently, Gary Stanley replaces Geoff as the contact person for VTC. In addition, a new e-mail address for Geoff would be GeoffSpells@btconnect.com.

Andrew Flynn reported that with immediate effect all the Christian Vision stations frequency managed by FMO CVI would have a single common broadcaster code of CVC. This replaces the broadcaster codes VIL, CVO and VOC previously used.

These minutes were prepared on behalf of the HFCC Steering Committee by Dennis Thompson, Member of the Steering Committee. This is a condensed version of the complete minutes, with some explanatory notes added.

Hurricane Wilma Strikes Two NASB Members in Florida

This year's hurricane season, which ran from June 1 to November 30, was a record-breaker -- more hurricanes than any other year in recent history. There were so many storms that the entire English alphabet was used to name the events, so the Greek alphabet had to start to be used as well.

At the end of October, Hurricane Wilma swept through Mexico's Yucatan Peninsula and then made its way back to the state of Florida in the U.S. As it went across Florida from west to east, Wilma did some serious damage to two shortwave stations: WYFR in Okeechobee and WRMI in Miami. Both are long-time members of the NASB.

The eye of Hurricane Wilma hit the southwest coast of Florida and then made its way right across the southern part of the state, pretty much right between WRMI to the south and WYFR to the north. Wilma took WYFR off the air on October 24. The transmitter building fared much better than it did in the devastating storms of 2004. Damage to the antenna field -- though less than from 2004's hurricanes Frances and Jeanne -- was fairly wide-ranging, including transmission lines, dissipation lines, antenna switches and antennas. With the return of electrical power on October 29, sufficient repairs had been made that most of the transmitters came back on the air that day. Repairs continued, and by November 3rd, all 14 transmitters were back to a full schedule of operation.

The National Hurricane Center in Miami first thought that Wilma would be a category one hurricane (i.e. the weakest category) when it hit the Florida coast, but it suddenly strengthened to a category three by the time it got there. Floridians knew a hurricane was coming, but they didn't expect such a strong one.

Some of the worst-affected areas were the metropolitan areas of Miami and Fort Lauderdale, known as Miami-Dade and Broward counties, respectively. WRMI's transmitter site is in Hialeah, which is in northern Miami-Dade County, near the Broward County line. This area experienced some of the worst hurricane winds and damage. Throughout the Miami area and beyond, the hurricane damaged the electrical power grid more than any hurricane in history. Most of southern Florida had no electricity for several days after the hurricane, and it took about three weeks to restore power to all customers. Telephone lines and cellular phone services went down, and in many places there was no running water. Thousands of traffic lights were damaged, and the rest had no power. Tens of thousands of trees and utility poles were knocked down by the force of the hurricane winds, blocking roads and highways. Countless homes, vehicles and commercial buildings were damaged or destroyed. In short, this was the worst hurricane to hit the Miami area since the infamous Hurricane Andrew in 1992.

Wilma hit early on Monday morning, October 24. WRMI's office in the western suburbs of Miami had no power until the following Friday. Most of the station's employees had no power at their homes for several days. Telephone and cellular service was sporadic at best, so it was difficult for the staff to even keep in contact with each other. But thankfully no one was physically hurt.

At WRMI's transmitter site in Hialeah, power was not restored until nearly two weeks after the hurricane. In addition, the high winds damaged both of the station's antennas, particularly the log periodic antenna used to reach North America, and they knocked down the security fence around the other antenna -- a corner reflector used to reach the Caribbean and Latin America. WRMI got back on the air to the Caribbean and Latin America on 9955 kHz on Sunday, November 6th. But the North American antenna needed repairs by the factory in central Florida, which took a few weeks more. In the meantime, a temporary antenna was set up for the North American service on 7385 kHz.

WRMI narrowly escaped the wrath of the two hurricanes that damaged WYFR in 2004. But WRMI was also off the air for part of a day in September of this year when Hurricane Rita went through Florida from east to west and knocked out electrical power at the transmitter site for about eight hours. To everyone's relief, the hurricane season ended on November 30th.

NASB Members:

Adventist World Radio
Assemblies of Yahweh
Family Stations Inc.
Far East Broadcasting Co.
Fundamental Broadcasting Network
La Voz de Restauracion Broadcasting, Inc.
Le Sea Broadcasting Corp.
Radio Miami International
Trans World Radio
Two If By Sea Broadcasting Corp.
WBCQ---The Planet
Word Broadcasting
World Christian Broadcasting
World International Broadcasters
World Wide Catholic Radio

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