Document No. 13

REPORT OF THE GENERAL COUNSEL TO THE BOARD OF DIRECTORS

January 8, 2009
Windsor, Connecticut

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TABLE OF CONTENTS

Greetings. It is my privilege to submit the following report to the Board of Directors on legal and regulatory matters in which this office has been involved since the last meeting of the Board in July in Hartford. The following comments are attorney-client privileged information and work-product, and should be considered confidential, restricted to Board members, Vice Directors, and Board meeting attendees only.

I. FCC Matters

A. Overview of FCC Regulatory Environment (some observations).

The FCC is due for some wholesale changes due to the end of the non-performing, and now infamous Kevin Martin FCC, which is imminent. Communications Daily reports that Martin has indicated that he will resign prior to Inauguration Day. One can only hope that the next FCC Chairman will have a different management style and a different outlook on communications regulation than has the Martin FCC. Any semblance of collegiality at the FCC has been gone for some time now. Increasingly sharp conflicts among the Commissioners have been made public, most especially between Democratic Commissioners Copps and Adelstein on the one hand and Martin on the other. Martin has had relatively little support or defense from his fellow Republican Commissioners, Tait (who is now gone) and McDowell; Tait was really not FCC Commissioner material, and McDowell is more independent in his thinking, and has not always sided with Martin. Tait is gone as of January 5, 2009, her term having expired and no reappointment being on the horizon for her. There is interesting insider trading on this subject. Apparently, Tait's nomination for a second term was not acted on by the Senate because Senator Reed of Nevada had conditioned confirmation hearings on Kevin Martin's resigning from the Commission prior to the inauguration, which Martin refused to do. So, Martin essentially threw Tait under the bus in an ongoing effort to thumb his nose at Congressional Democrats.

The FCC, and specifically Kevin Martin, was excoriated by the House Energy and Commerce Committee in a majority staff report released December 9, 2008 entitled *Deception and Distrust: the Federal Communications Commission Under Kevin J. Martin*. This report was not what we were expecting, frankly. I reported to the Board last July that Dave Sumner, John Chwat and I had met in May with Steven Rangel, Esq., an Investigative Counsel with the House Energy and Commerce Committee (who was the chief investigative counsel in what was then touted as a wide-ranging investigation of "mismanagement by the FCC at the highest levels") about the BPL decision and how it reflected on FCC mismanagement. We were led to believe at that time that what was planned was a hearing, or series of hearings, that would expose instances of the FCC's malfeasance. Featured was to be ARRL's BPL appeal, and the FCC's coverup of the engineering that disclosed BPL's interference potential to Amateur Radio. Indeed, this was an oyster on the half shell for Rangel, because the Court of Appeals had already exposed the FCC's malfeasance, and all Rangel's investigators had to do was incorporate the Court's holding in their report. On the other hand, it was a bit unfair, really, to tag Martin with all of the FCC's failings on BPL, because much of that was driven earlier,

during Michael Powell's tenure as FCC Chairman. If anything, Powell was more White House ideology-driven than was Martin. But Martin was on deck as a Commissioner during the entire BPL debacle.

We had hoped for a hearing, and the opportunity to testify at that hearing. We asked Rangel why this was coming so late in Martin's tenure, since he would clearly be gone after the Presidential inauguration: he was neither Obama's nor McCain's man. Rangel told us that the Committee wanted not only to expose the errors that Martin made, but to provide a roadmap of things that the next chairman should not repeat, or indeed that any chairman in the future should ever do again. After the meeting, during which we spent a good two hours discussing BPL and other FCC problems with Rangel and his investigative team, we sent followup materials to Rangel to show him what it was that the FCC had failed to reveal in their studies of BPL (on which they claimed to have relied in adopting the BPL rules in the first place). Then, we heard absolutely nothing until the report was released in December.

The report was accurately reflective, I think, of the sentiment at the FCC (the report is worth a read if you haven't had a chance to do that yet) and the feelings of the staff toward the Chairman. The morale at FCC has never been worse; the staff, historically very closed-mouthed about the Chairman and Commissioners, and often very defensive of the then-current administration, is now openly and candidly hostile toward Martin. In my experience, Martin's micromanagement of the FCC was the largest problem; the staff was muzzled by Martin's office; they were told to limit meetings with the public; Martin had to review all of their work-product, and that means, quite literally, all of it. No hiring and firing decisions were allowed except those dictated by the Chairman's office, and no staff member seemed to be empowered in the slightest. Many members of the staff reportedly wore black attire to work on a day when Martin's term was renewed. There were instances of retaliation against members of the staff that disagreed with Martin's policies.

The Report did reflect a very extensive investigation, but it never involved any public hearings. And it was not a Committee report, as the result, but rather only a staff report from the majority, so its impact is not what it could have been.

What is the relevance of this report to Amateur Radio? Well, perhaps not much at this point, but it explains a lot, as is discussed below on the issues of Amateur Radio enforcement and FCC's inaction on BPL rules post-remand from the Court of Appeals. The portion of the report that pertains to BPL is a mixed bag. The report notes allegations that the FCC ignored instances of BPL interference to Amateur Radio stations. This, of course, was based on information that we provided to Rangel about the cases that FCC swept under the rug, and about which Joel Harrison and I had a meeting with the Enforcement Bureau that was far and away the most contentious meeting I have ever attended at the FCC. The FCC did, most certainly (doubtless at the Chairman's instruction), sweep BPL interference cases under the rug. The report also notes that the Commission also withheld documents that FCC admitted that it relied on in adopting the BPL rules. Noting that the adoption of the BPL rules was under Powell, the Report

focused on the failure of the FCC to enforce the non-interference obligation of BPL companies after the rule was adopted. The problem, though, was that the majority staff ultimately could not overcome the strong, bipartisan sentiment in favor of broadband rollout, and found that BPL companies had since adopted new technologies which "rendered moot" the issue of BPL interference. Dave Sumner wrote Congressman Dingell, who spearheaded this investigation, to explain that this was not the case; that the FCC had not done what the Court of Appeals had ordered, and that the rules were still completely inadequate to protect licensed radio services from interference. But of course, the report was out and the damage was done.

During the six months since the last Board meeting, there have again been relatively few FCC actions or ARRL/FCC interactions of note. Overall, the FCC has been relatively quiet, in terms of Part 97 service rules, spectrum allocations, and there has been virtually nothing happening in Amateur Radio enforcement matters. Most of this inactivity is due to paralysis at the FCC caused by Kevin Martin. FCC inactivity crosses all radio service lines. If a regulatory concern is unrelated to the Digital Television Conversion, it receives no attention from FCC whatsoever. Riley Hollingsworth's retirement in July and the FCC's failure to appoint a replacement for him to date has led to complete inaction in enforcement. This is discussed below.

The Board should be prepared for significant further delays in FCC action on various pending items discussed below. The reason is this: With Commissioner Tate's departure and the imminent departure of Chairman Martin, the FCC will be left with three Commissioners. There is speculation that the President will, after the Inauguration, appoint one of the two sitting Democrats, Adelstein or Copps, to serve as an interim Chairman, with a permanent one to follow. But there are backlogged items in all radio services, the DTV conversion scheduled for February 17, and a fairly decimated staff at FCC. It should be anticipated that Amateur items, most all of which are drafts waiting for approval, will lag more urgent issues at FCC. Of the issues in the Wireless Bureau in the front office, the acting Chief, James Schlichting, takes instruction from Kevin Martin. Shlichting is not likely to remain acting Chief for long, and he is unlikely to act on any discretionary items after Martin's departure. The ugly reality is that Amateur items may languish until mid-2009.

At the instruction of the Executive Committee, we have aggressively lobbied for a replacement for Riley Hollingsworth. We are expecting a replacement imminently. This report will provide a candid discussion of the circumstances, as we understand them, of who this replacement person is and what the circumstances are of the replacement. I would urge that you not attempt to evaluate the replacement's performance too early in her tenure, or to view the situation as an equivalent replacement for Riley. Riley's success in Amateur Radio enforcement was largely due to his deterrence strategy and his visibility early on. While we are hoping that the same strategy will be employed by the successor, we should not necessarily expect the same level of visibility that Riley brought to the job, at least not at first. As the result of a meeting that I had with the Chief of the Enforcement Bureau, her deputy, and with George Dillon (now retired from FCC) recently, we are told that we will be able to work closely with Riley's replacement, and I

recommend that we dedicate sufficient resources to keep Riley's replacement up to speed on Amateur enforcement issues and help keep the visibility, and therefore the deterrence value, of FCC enforcement high.

We remain concerned about several items discussed below. The Pave Paws problem in Northern California continues to plague northern California repeater owners. Very recently, due to some dogged work by Dan Henderson and Ed Hare working with the Air Force staff, we were able to get copies of some of the tapes used by the 85 EIS, the engineering group that has been investigating Amateur Radio interference to Pave Paws radars at 70 cm, Preliminary review of these tapes is not encouraging. We have assumed, as indeed we had to early on, that 85 EIS had reasonably accurately identified (by the repeater IDs) the allegedly interfering repeaters. Analysis of the tapes, however, indicates that there are substantial errors in the identifications made by 85 EIS, both in their review of phone and CW IDs on repeaters. We will be addressing this with our primary contact at DoD, Fred Moorefield, immediately. This case remains of great concern, inasmuch as it represents the first time in recent memory that the long history of cooperative, compatible spectrum sharing between Amateurs and the Federal Government has been drawn into substantial question. We have consistently acted cooperatively beyond what some repeater coordinators believe is reasonable for an association that is charged with protection of spectrum access by our members. The question is how far we go in cooperating with the Air Force. Our recent discovery of the inaccuracies in the 85 EIS databases, and their errors in identifying allegedly offending repeaters, bears substantial re-evaluation of the level of cooperation that the Air Force is due. The Board's guidance on this matter will be appreciated.

Other front-burner issues are renewed efforts to obtain a low-frequency allocation and our continuing effort to protect the 70-cm band against intrusion by Part 15 devices such as the Reconrobotics device; and our continuing interest in revision of the FCC's Part 15 rules governing BPL devices.

B. FCC Spectrum Allocation Issues.

1. ARRL v. FCC and USA, Broadband over Power Line Systems. We have had no formal contact with the FCC about the BPL rules post-remand since July 9, 2008, when Dave Sumner, Joel Harrison and I met with Julius Knapp, and other OET staff on this topic. At that meeting, we discussed a possible regulatory approach for BPL systems, post-remand from the Court of Appeals. We presented ARRL's proposed revised rules, which we said would address the needs and concerns of Amateur Radio operators in avoiding harmful interference from BPL while imposing the minimum necessary regulatory obligations on BPL deployments and without significant constraint or substantial redesign or retroactive build outs of BPL systems.

What we offered to OET as a global resolution of the matter was as follows:

The Court of Appeals remanded the BPL case to the Commission in two respects. First, it ordered that "[o]n remand, the Commission shall make available for notice and comment the unredacted 'technical studies and data that it has employed in reaching [its] decisions'…and shall make them part of the rulemaking record." The discussion of what was not released was limited to the five, substantially redacted early field studies that the OET staff conducted of BPL field trials.

Second, the Court ordered that on remand, the Commission "shall either provide a reasoned justification for retaining an extrapolation factor of 40 dB per decade for access BPL systems sufficient to indicate that it has grappled with the 2005 studies (i.e., the Crieff, Scotland studies done by OFCOM), or adopt another factor and provide a reasoned explanation for it."

Since the 2004 rulemaking in Docket 04-37 was commenced, BPL technology has evolved. Second generation (2G) BPL modems are typically capable of -35 dB of "notching", which is more than 10 dB better than the first generation. Commission rules do not require that Amateur allocations be "notched" but the 2G modems are now deployed almost universally and ***can*** (but are not required to) utilize this feature. DS2, Homeplug and Panasonic have indicated that their 2G modems are capable of such. Main.net is believed to be as well. So, rule modifications can be adopted to incorporate the two parameters of which the modems are now capable: (1) mandatory notching of all Amateur allocations by BPL systems; and (2) notch depths of 35 dB. These two factors would be sufficient together to reduce the number of potential interference problems to a small enough number that it would be practical to address them on a case-by-case basis. They are also achievable by present BPL technology without significant limitation on BPL deployment.

As to the 40 dB/decade extrapolation factor, the Commission must revisit that per the Court's Opinion. Since a reasoned justification for a 40 dB/decade extrapolation factor cannot be sustained in the face of the existing contrary evidence, the Commission should adopt another extrapolation factor that is consistent with the evidence.

After our meeting, Bruce Romano, OET Deputy Chief, called my office and asked whether our position above necessitated full time notching at 35 dB or just when there was an interference complaint. I told him that full time notching was called for, since the modems were capable of such and because otherwise, the BPL companies would simply not implement the notching capability. Furthermore, mobile interference had to be addressed before the fact, not afterward. He said he wanted to clarify that point.

We were promised nothing, really, at that meeting. We have been sanguine about the status quo, post-remand, because the remand left the BPL rules in limbo and because regulatory uncertainty has been harmful to the BPL companies. We told OET that at the meeting. But another way to view it, and probably the way that Martin and the BPL companies (that have not folded their tents) have looked at the matter, the Court did not vacate the rules (because we didn't ask them to) and the rules are in place, so there is no hurry about this.

It is quite clear that nothing will be done by FCC until well after a new Chairman takes over, which could be several months hence. The marketplace's rejection of BPL, a process that commenced long before the economic disaster that we have been facing lately, has justified our doing nothing more about BPL lately. Letting BPL die a slow death may be a fine response for us to take. It now seems a virtual certainty that BPL as a broadband mechanism is not commercially viable. But it is still a contender for smart grid systems, and the Congress is in full smart grid support mode, having recently passed legislation that encourages such systems with accelerated depreciation of them. So BPL is not dead as an interference source, and revised Commission rules are still necessary.

Though we have been satisfied with a passive role, not pushing the Commission to do the specific things that the Court ordered it to do, we may want to re-evaluate that position in view of the unfortunate conclusion of the majority staff of the House Energy and Commerce Committee report, which takes virtually all the pressure off of the new Democratic FCC Chairman to do anything about changing the BPL rules (since the majority staff thinks that interference is now "moot." The membership was quite exuberant about our aggressive role toward BPL so far, and they have an expectation that we will follow up on this. So, Board guidance on the proper level of activism on BPL going forward is welcome.

2. Pave Paws Radar Interference, 70 cm. Sacramento, CA area and Cape Cod, MA.

We are looking at the tail end of the Air Force's effort to restrict many 70 cm repeaters in northern California due to alleged interference from Amateur stations to the Pave Paws "upgraded" radars (PPRs) at Beale Air Force Base. As we have discussed in the past, everyone who has looked at this from a technical perspective, including the FCC District Director in San Francisco and Ed Hare, is of the view that the Air Force is really seeing interference from Amateur repeater stations that causes PPRs to show false effects on the radars or shuts them down. It is clearly the obligation of Amateur stations to stop interfering with the PPRs, or alternatively shut down the Amateur repeater stations. Although the test for Amateur interference to the PPR is whether or not it is "harmful," any interference that regularly disrupts the PPR is going to be labeled harmful interference without any doubt, given the functions of the radar.

That said, this has been difficult because of the limited information that the Air Force has been able or willing to share with ARRL due to the national security issues involved. Most recently, we have become seriously concerned about the accuracy of the identification by 85 EIS (the engineering contractors for the Air Force, which has investigated the interference and done on-air monitoring of repeaters from the Pave Paws site at Beale.

To review, for those of you new to this issue, approximately 1/3rd of the 733 70cm repeaters within 135 miles of the PPRs at Beale AFB have been identified by the Air Force as sources of harmful interference. FCC has contacted all of the identified repeaters and informally asked that they be modified so as to mitigate the interference or else shut

them down. There are no instances of mandatory shutdowns, but of course if a repeater owner is uncooperative, FCC will likely shut down that repeater. They don't want to formally do that, because it would require under the Communications Act a hearing, and that in turn would require that the Air Force prove that there is harmful interference from that repeater. There is a risk, however, of establishment of a "quiet zone" which would have a substantially adverse effect on all Amateur operations near Beale.

There are two reasons for our concern now, both dealing with identification of allegedly interfering repeaters. First, on November 5, 2008, we wrote to David Pooley, the Air Force contact person at Peterson AFB in Colorado who is working on this, telling him that there remains a problem (which ARRL has noticed throughout the interference resolution process) of misidentification of repeaters. We said that occurrences of misidentification were apparently due to substantial inaccuracies in the database that 85 EIS has been using. We did not think that the problem was related to the monitoring work of 85 EIS (though that is now in substantial question). In a very recent case (as but one example), a radio amateur whose repeater was identified by 85 EIS as an interference contributor had not had a repeater on the air in over ten years.

ARRL has three times now provided to 85 EIS the latest listing of repeaters from the ARRL Repeater Directory in northern California (the source of which is NARCC, the repeater coordination group in Northern California, whose data ARRL has found to be quite accurate at all times). We concluded that, while this information may be in use by 85 EIS, they must <u>also</u> be using old, outdated information about Amateur Repeaters, the source of which is unknown to ARRL. During the first conference call about Pave Paws interference, 85 EIS told us that the list they were using for the first round of testing was perhaps 8-10 years old, that 85 EIS found on the Internet.

We noted to Pooley that the effect of the inaccuracies in the database is worse than it might initially appear. Misidentification of repeaters causing interference reduces the credibility of the 85 EIS findings, and radio amateurs seize on those incidents as evidence that 85 EIS is not making reliable determinations and is guilty of "overkill". ARRL was not satisfied with the methodologies and the field work of 85 EIS as it relates to correlating an interfering signal heard on a particular frequency with the identification of that repeater from a listing of repeaters in the database that 85 EIS uses.

ARRL has provided to the Air Force what we believe is the most accurate database there is in this context. However, apparently 85 EIS is not using those databases, or if it is, it is also using the old, outdated one as well. So, although the majority of repeaters have been correctly identified, it is possible to do much better. We told Pooley that we hoped that starting immediately, 85 EIS would use *only* the most current list provided by ARRL of repeaters in northern California. Unfortunately, Pooley never responded to this letter at all, despite reminders from Dan Henderson to him.

Most recently (in the past week or two), after repeated promises by Pooley and repeated reminders from Henderson, Pooley finally provided to ARRL tapes of repeater identifications, and 85 EIS' identifications of the offending repeaters resulting from those

tapes. In what is initially estimated to be up to 10% of the cases, Dan Henderson and Ed Hare have determined that 85 EIS ":busted" the repeater call signs (both phone and CW). Dan and Ed are now sorting them out. This, however, will have to be brought (in a very visible manner) to the attention of the Air Force, because it now appears that inevitably, a substantial number of the repeaters identified as interferers were wrong. The combination of the misidentification from the tapes, and the use of an incorrect listing of repeaters, makes the process far sloppier than we were aware of earlier. We will take this up with the Air Force immediately.

3. Expansion of 5 MHz Band Operating Privileges; RM-_____. This Petition for Rule Making was filed on October 10, 2006, more than two years ago. It would do three things by way of enhancement of Amateur use of the five channels allocated in the 5 MHz band:

> 1. The replacement of the 5 MHz channel receiving interference (5368 kHz), with a replacement channel (5358.5 kHz), USB only in the SSB mode;
> 2. Authority to use additional modes, including CW, PSK31 and PACTOR-3; and
> 3. A power increase from 50 watts ERP to 100 watts ERP, provided that VOX is used in the SSB mode.

There is finally some news about this long-delayed Petition. Bill Cross reports that there is an OET Notice of Proposed Rule Making drafted (and now in the front office of OET) proposing the changes in our Petition for Rule Making. The Petition will not be receiving an RM number, but instead, the FCC will go straight to the NPRM stage. The status of the draft is that it is on OET Chief Julie Knapp's desk. Because of Paul Rinaldo's excellent work getting a letter from NTIA early on, saying that they have no problem with the proposal, OET decided that they didn't need to go through two rounds of comments on this. We are told that we should see the NPRM "soon" though Knapp needed Martin's approval to release this, which has not been forthcoming and may not be released for some time.

The NPRM will not be a stand-alone item. In addition to proposing the rule changes we suggest for 5 MHz, the NPRM will also be used as a vehicle for Part 97 "cleanup" things, such as implementing in Section 97.303 of the Rules the Part 2 (Table of Allocations) footnotes. Anything from the past WRCs that do not appear in Part 97 now will, Cross says, be addressed in this NPRM (which may also include an order).

I have continued to "bug" Knapp about this since the Executive Committee meeting, but he tells me that his schedule is set by the Chairman's office.

4. WP Docket 08-63, ReconRobotics, Inc. Request for Waiver of Part 90 of the Commission's Rules for a Video and Audio Surveillance System at 430-450 MHz. This is another OET matter because it is a Part 15 waiver proceeding. ReconRobotics "Scout" is a miniature mobile robot that provides real-time video reconnaissance of

hostile or dangerous environments. It was designed for use in Iraq, and to transmit in the 430-450 MHz band. On January 11, 2008, Reconrobotics filed a request for a waiver of Part 90 of the Commission's Rules to permit the marketing and use in the United States of the device, which can be thrown, dropped or launched into hazardous areas and can provide an operator located a short distance away with video and audio, along with infrared, biological, chemical, heat, radiation or other data. The waiver would permit equipment authorization of the Recon Scout, and its use by state and local law enforcement and firefighting agencies and by security personnel in critical infrastructure industries. The waiver is required because it operates in the 430-448 MHz band, where high power Part 15 operation is not permitted. ReconRobotics claimed that because the Recon Scout operates with 1 W peak power, it is unlikely to cause interference to Radiolocation or Amateur Radio.

The necessary bandwidth is apparently around 6 MHz. The request was vague, and does not specify what permanent waivers of Part 90 rules the company wants. We argued that more than the Part 90 rules would have to be waived. "Because the three channels (430-436 MHz, 436-442 MHz and 442-448 MHz) on which the device is proposed to operate are all within 430-450 MHz, a waiver of Section 2.106 of the Rules, the Table of Allocations, is also required. Per Section 90.273 of the Commission's rules, frequencies above 429.99375 MHz and below 450 MHz are unavailable to stations in the land mobile service anywhere in the United States."

We also argued that the waiver request fails to establish that the 420-450 MHz band is the only viable choice and that no other band would be suitable. ReconRobotics did not prove or demonstrate that other bands were not suitable for its purposes. Among other things, we also argued that a permanent waiver of the Commission's Rules permitting nationwide marketing and use on a licensed basis of land mobile short-range transmitters, benefited only one manufacturer to the exclusion of all others, and as such it was an inferior method of conducting spectrum allocations and spectrum management. So, ReconRobotics should be required to refile its proposal as a petition to modify the Table of Allocations for this purpose. Its petition should be vetted in the normal course, and would be properly evaluated based on a complete technical compatibility showing, which was not included in the waiver request. Our comments were quite hard-hitting. We brought this to the attention of our friend in the Air Force Frequency Management office, Fred Moorefield, and he agreed to help oppose this at the IRAC.

The Wireless Bureau weighed in on this as well. According to Cross, WTB told OET that Reconrobotics hadn't made its case at all; that what this boiled down to (and we said this in our comments as well) was that the company made this device for use in Iraq, where the choice of frequency band made some sense, and they are unwilling to reconfigure the device to operate here in a band that made more sense, such as 902-928 MHz or 2400-2483.5 MHz.

Despite some fairly aggressive reply comments filed by ReconRobotics, it does not appear that they have made their case very well. Nevertheless, Mitch Lazarus represents them, and we never underestimate him. The Executive Committee in October

ordered that we prepare and file a written *ex parte* statement with a technical showing that the relative building attenuation of signals from a device like this would not be substantially different as between 440 MHz on the one hand and 915 MHz on the other. We have not yet prepared and filed this *ex parte*, due to Ed Hare's unavailability due to some other issues. However, Brennan Price, Ed Hare and I will collaborate on this filing shortly, and it is anticipated that it will be filed in late January or early February. We are assured by the FCC staff that such a filing is still timely. Ed and Brennan will assemble a study showing that the range of the device at 902-928 MHz or 2400-2483.5 MHz would not be substantially reduced from that at 430-450 MHz, which was the principal argument of ReconRobotics in favor of their proposed use of 430-450 MHz (and which, as discussed above, we know to be pure sophistry).

5. WT Docket No. 06-49; Amendment of the Part 90 Rules in the 904-909.75 and 919.75 - 928 MHz Bands. No FCC action has been taken on this matter either since the last Board meeting. FCC on March 7, 2006 had released a Notice of Proposed Rule Making, which re-examined the portions of the 902-928 MHz band used for multilateration LMS (this is the high-powered locating system, operated under Part 90, which hasn't caught on very well). FCC wanted to know whether greater opportunities can be provided for LMS service while continuing to accommodate licensed and unlicensed uses of the 902-928 MHz band. ARRL comments, filed May 30, 2006, urged that the Commission look at the 902-928 MHz band allocations on a broader basis. Our comments attempted to protect at least the most sensitive Amateur operations at 902-928 MHz. We noted that the two most heavily used Amateur Radio modes are weak signal communications in the 902.00-903.200 MHz segment (centered at 902.1 and 903.1 MHz), and repeaters throughout the band. Amateur weak signal operation (telegraphy and single-sideband) has focused on two segments in particular in the United States: 902.000 to 902.200 and 903.000 to 903.200 MHz. In recent years, there has been a gradual increase of noise floor in the weak signal 902 and 903 MHz segments. Our comments requested that these segments in particular receive consideration for interference protection, such as limiting new applications, particularly those of high power density or duty cycles. Such an accommodation is necessary in order to protect the reception of very weak received signals from interference, especially from unlicensed systems, individually or in the aggregate. This request was off-topic for this docket, but it was an opportunity and we took it. ARRL filed no reply comments in this proceeding, as none appeared necessary. It is unclear whether FCC will adopt any further rules in this proceeding dealing with LMS.

6. Docket 05-356, Octatron, Inc. and Chang Industry, Inc. Part 15 Waiver. This proceeding still has not been resolved (which indicates that the FCC won't be adjudicating the ReconRobotics waiver anytime soon). On December 29, 2005, FCC released a public notice seeking comments on a proposal by the two companies above, to permit unlicensed analog emissions at a power level of 1 watts EIRP at 902-928 MHz. The companies have developed a 360-degree video and audio surveillance system that they claim will provide live video and audio surveillance via a small, egg-shaped sensor that can be thrown into a remote, confined or potentially hazardous location, or pole mounted. It is ostensibly for law enforcement use. If the device was digital, and provided it could meet certain power spectral density limits, it could

operate at up to 1 watt. As it is analog, however, it is required to operate under Part 15 at far lower levels. We opposed this waiver in comments filed January 30, 2006. Octatron and Chang filed reply comments. American Petroleum, Sprint Nextel, IEEE and others also opposed the Petition. No action has been taken on it to date, although there are recent ex parte filings by many opposing parties. In February of 2007, Octatron and Chang filed an amendment stating that they would be willing, as a condition of their waiver grant, to reduce the analog power from 1 watt TPO and 4 watts EIRP (which is the digital power that they could use under the existing rules) to 1 watt TPO but 750 mW EIRP. No comments have been filed on this "amendment".

7. ET Docket No. 07-257, Veroscan Proposal for RFID system at 902-928 MHz to identify medical surgical items. This is a waiver request filed by a Plano, Texas company which makes RFID systems. They propose a rule waiver to allow them to market and deploy under Part 15 an unlicensed RFID system in the 902-928 MHz band which would be used to track tagged surgical items, such as disposable sponges, to make sure that no sponges were left inside a patient during surgery. Section 15.247 of the FCC rules limits such RFID systems to 4 watts EIRP. This product would operate at 25 watts EIRP, during the time that it is used to scan in and around a surgical patient within the confines of a medical facility or hospital. FCC placed this waiver request on public notice on November 13, 2007 with a comment date of December 13, 2007 and a reply comment date of December 28, 2007. ARRL did not file comments on this waiver request, due to the limited deployment of the device, the low duty cycle (less than 2 minutes per measurement), and the somewhat shielded operating environment. No action has been taken by FCC to date.

8. RM-11404; Alfred E. Mann Foundation, Petition to Establish Medical Micro-Power Network Service. This medical group filed a Petition for Rule Making at FCC seeking to establish, in 5 MHz channels in the 413-457 MHz band, a Medical Micro-power Network Service (MMNS) at very low power levels (i.e. microwatts, but with a Master Control Unit using 1 milliwatt) to coordinate the firing of artificial nerve impulses from implants in artificial limbs. Paul Rinaldo looked at this and decided that, provided that the devices were immune to undesired RF, this proposed use was not a problem for radio amateurs. Paul noted to them, however, and to their Washington lobbyist and allocation specialist, that their real problem was not Amateur Radio but military radar facilities, which utilize far higher power than does the Amateur Service. Our contacts at DoD are very much opposed to this. There are numerous comments filed that are favorable in this RM proceeding.

9. ET Docket 08-59; Ex Parte Presentation of GE Healthcare (GEHC) Proposal for Allocation of the 2390-2400 MHz Band. On December 27, 2007, General Electric Healthcare, in a 2006 Docket dealing with spectrum requirements for medical and health care systems, filed an *ex parte* statement proposing in effect to create a new secondary allocation for Body Sensor Networks (BSNs). These systems are used for wireless patient monitoring. They are very short-range networks consisting of multiple body-worn sensors and nodes, connected via wireless to nearby hub stations. Now, sensors wired to monitors can be pulled out of patients, and the patient's mobility is restricted. Both problems would be solved allegedly by this wireless networking. The proposed band for this is our primary allocation at 2390-2400 MHz, which is going largely unused at the

present time. BSN would be a licensed service, though proposed as a secondary one. The proposal, actually, is for the use of the entire 2360-2400 MHz band, but in any given area, only 20 MHz of that band would be used. The proposal specifically mentions Amateur Radio and claims that, because the band 2390-2400 MHz is "designed for fast scan video, high rate data, packet, control and auxiliary applications" and not weak signal communications, it is well-suited for sharing with the BSN systems.

ARRL filed comments on May 27, 2008 in response to a Public Notice released by FCC on this specific proposal dated April 24, 2008. We noted that we do not, frankly, expect a significant amount of harmful interference to Amateur operations at 2390-2400 MHz from BSNs. The GE proposal, however, makes some erroneous assumptions about Amateur uses in these bands, and the interference potential of the devices *to* Amateur Radio stations in residential areas is not known. GE's proposal specifically mentions Amateur Radio and claims that, because the band 2390-2400 MHz is "designed (sic) for fast scan video, high rate data, packet, control and auxiliary applications" and not weak signal communications, it is well-suited for sharing with the BSN systems. This is of course a misconception on GE's part. We noted that there are no limitations on the type of Amateur uses to be made in these bands.

Because BSNs would be deployed not only at medical facilities but also in residential environments, we urged that a compatibility analysis, (not made by GE so far), should be made, based on an anticipated close geographic proximity between BSNs and all different types of residential Amateur Radio operation. Furthermore, because of the growing use of 2400-2450 MHz for short-range wireless broadband, and other unlicensed uses, some Amateur uses of that segment of the band will inevitably migrate to the 2390-2400 MHz segment. It is, therefore, inappropriate to use existing activity as a predictor of future Amateur activity in the 2390-2400 MHz band, for purposes of determining compatibility of a new device or service in the same band. We were far more concerned, however, about potential interference to BSNs from licensed Amateur Radio operation in the 2390-2400 MHz band. The ramifications of RFI to these systems in terms of danger to medical patients are obvious, and potentially severe. BSNs, which GE states will "become ubiquitous," must, according to GE, "be capable of reliably conveying unprocessed life-critical monitoring data to devices that are responsible for processing and primary alarming. In these scenarios, if the link were lost, a serious event such as arrhythmia or hypoxia could go unalarmed." We told them that a different band than a mobile, itinerant Amateur band should be selected for such sensitive communications. It is unclear why GE could not make use of the bands 608-614 MHz, 1395-1400 MHz or 1427-1429.5 MHz in the Part 95, subpart H Wireless Medical Telemetry Service, which seems to be well-suited to BSN applications, or in the MICS on bands other than 2390-2400 MHz.

No action has been taken by FCC yet on this. However, I have talked extensively to Ken Keane, the attorney for the Aerospace Flight Test Radio Telecom Coordinating Council, about this proceeding, which is a major problem for flight test telemetry (2360-2395 MHz). Ken is of the view that GE Healthcare has some traction on this at FCC and might get the allocation they are looking for. GE has argued to FCC recently that they are

willing to accept any interference from Amateur Radio at 2390-2400 MHz. That is little comfort, indeed, with respect to a radio amateur who is accused of causing harm to a medical patient or interfering with patient monitoring electronics in a residential environment.

10. Techno-Sciences, Inc. STA Application for HF bands (File Number 0391-EX-ST-2007; ARRL filed informal objection to Application). This was an application filed July 26, 2007 for an STA for data transfer on HF bands that include large portions of Amateur bands at 75, 30, 17, 12 and 10 meters. The proposal was for paths less than 1,000 miles, at 125 watts ERP, using 3K30G2D emissions. We filed an informal objection on January 14, 2008 and the application was dismissed without prejudice on February 14, 2008. There was virtually no explanation of the purpose of these communications, and we noted that OET had asked the applicant for clarification of the project, specific goals to be achieved, and an explanation of the "very broad frequency requests" but got no response So, it appeared to us that the company was trying to do licensing without actually going to the trouble of applying for a license. We thought the dismissal was the end of this.

However, we were contacted on September 16, 2008 by Stuart Ehrenberg, K8WG (an ARRL Member), who said that he was newly hired by Techno-Sciences and he wanted to talk to us about this application. Stuart attempted to persuade us not to oppose this STA in the future (anticipating that it would be refiled). He said that Techno-Sciences (TS) is a defense contractor and is working with the U.S. Navy (actually some division of the Navy that handles technical matters) to develop an HF ALE system that the Navy apparently is ready to sell to the Navy of Indonesia. TS wants to test this product, which involves a lot of "pinging" to establish communications on a lot of frequencies. They want to test this system for six months, and promise that there will be less than about 10 hours total operation during the 3-6 month test period.

I asked him why Amateur bands had to be used; the Navy has plenty of HF spectrum available to them, and why didn't they go to the IRAC and get some government assignments. He gave me the usual explanation that that would take a long time, and the Navy was using their HF spectrum and that they would be happy to use non-Amateur spectrum, but that is harder than specifying Amateur bands, and they are willing to coordinate with us. He could not promise non-interference and wasn't trying to suggest that the STA operation wouldn't cause any, He accepted my offer to present any proposal that Techno-Sciences cared to make to the Executive Committee, and he said he would submit something, but he has not done so to date. This requires continued monitoring at FCC, which we have been doing.

11. Miscellaneous STA Applications, License grants, and Experimental Authorizations. In addition to Techno-Sciences, we have had to deal with an unprecedented number of erroneous and otherwise poorly selected license and STA applications and experimental authorizations in the last several years. In the past, we have typically not been concerned about experimental license grants which are temporary and issued on a non-interference basis, unless the applicant indicates an intention to use the

experimental authorization to establish an allocation in an Amateur band. However, occasionally, the incompatibility is so obvious that we are compelled to note this and object to even temporary, short term operation in Amateur allocations.

On April 1, 2008, we filed a Petition for Reconsideration of the grant by the Wireless Bureau of a license modification for the State of Ohio, University of Akron, which had been granted an application for channels above 430 MHz. The University is located just below Line A. Above line A, 421-430 MHz is available for land mobile. The University had been granted a minor waiver to use 421-430 MHz, but their application specified (and the Part 90 frequency coordinator erroneously coordinated!) channels above just above 430 MHz. Our petition for reconsideration was met with a very cooperative response by the University (whose representative I had dealt with previously in another professional matter) and the matter was quickly fixed by the coordinator modifying the license to delete the channels at or above 430 MHz. The University was quite apologetic.

On April 24, 2008, we filed a letter with the Wireless Bureau informally objecting to an Experimental license application filed on behalf of Miller Motorsports Park near Salt Lake City, which had applied for 448 MHz channels as well as some above 450 MHz for an international motorcycle race in late May and the first of June. The 448 MHz channels were on repeater pairs in active use near Salt Lake City. The basis for this is that European race teams were coming into the U.S. for this event and had no intention of reprogramming their radios. The radio person for the race called and asked us to withdraw our objection, which we refused to do, and so did the local Amateur Radio frequency coordinator. So, though the channels were probably used anyway at that event, FCC did not issue the experimental authorization for channels below 450 MHz.

A broadcast event coordinator who I know well recently applied for STAs for various channels below 450 MHz and was granted them for coordination of two televised events. I contacted him and told him under no circumstances was there to be any use of those channels in San Diego for an Air Race or in Chicago for some other broadcast event because there would be substantial interference to Amateur Radio and that we would be complaining about it and because he now knew of the interference potential in advance. He used other channels, and now knows to contact us before applying for any further experimental authorizations in the 420-450 MHz band.

Another example of a recent grant that was potentially quite problematic is WE2XRH in Alaska, which was granted to a company called Digital Aurora Radio Technologies (DART) for a series of transmitters on various HF bands including 7.1 – 7.6 MHz, using 20K0D7W emissions at 100 kW TPO and 660 kW ERP, in Alaska near Fairbanks. This is not a government contract. FCC granted this with a coordination condition that before commencing operation, DART had to contact for coordination purposes the Society of Broadcast Engineers, due to the operation of the station at “7.1-7.6 GHz (sic)”. SBE coordination conditions are normal in STAs and experimentals involving broadcast auxiliary spectrum due to the SBE’s volunteer frequency coordination program. When we inquired about this discrepancy, the FCC OET staffer

said that while there was an error in the GHz vs. MHz reference, he was leaving the coordination condition in due to the fact that the 7.1-7.6 MHz band included a broadcasting allocation. That was of course just post hoc rationalization for a stupid mistake by the staffer in issuing the experimental, but if these are going to be issued (and despite what OET tells us about their coordination with other bureaus before issuing STAs or experimentals, Cross tells me that no one ever contacts him or Stone about them in advance). The ultimate resolution was that this was modified to specify operation above 7.3 MHz, so that no Amateur band is involved.

Because of the increase in the number of experimental licenses and STAs issued for the use of Amateur spectrum that are fundamentally incompatible with Amateur operation, the Executive Committee decided that we should ask FCC to institute a process for dealing with these that is already used anecdotally by OET, and is used regularly where STAs are issued by FCC for bands allocated to the broadcast auxiliary service: FCC should standardize the process that the use regularly with the SBE and only occasionally with us, and put in a coordination condition with ARRL (really just a notification process) before the holder of the STA or the experimental operation starts up. Someone at HQ could receive these notifications, and there would not be that many.

What this would do is to provide us a means of (1) knowing where and when a potentially interfering experimental use is going to start up; (2) providing an opportunity for us to advise the holder that there is or is not likely to be interference to radio amateurs; and (3) where possible, to coordinate such operation away from likely segments of bands where interference is more likely than others.

Our policy on Experimentals and STAs, developed more on an ad hoc basis than anything else, has been to not worry with them because they are temporary operations, typically not serious interference sources, and because all are issued on a non-interference basis. But lately, perhaps due to the substantial volume of STAs and experimentals now issued by OET, there has been an increase in the number of potentially interference-causing STAs and experimental licenses. A coordination condition with ARRL for such would be helpful in dealing with them. We have proposed such to OET and hope for some informal action immediately.

The Board should also note in passing the grant of the renewal of Ambient Corporation's experimental license for nationwide BPL experimental operations on August 27, 2008. OET wrote us a letter, which was poorly justified but not entirely unexpected. We responded, asking for a requirement that the Ambient operations be added to the BPL online database. We argued that the justification offered by Knapp, that the public could look on the OET experimental license database for operations by Ambient, was absurd. The BPL database was supposed to be the comprehensive means by which the victims of inevitable BPL interference could identify the offending BPL system. That is not possible where Ambient is given special exemptions. No response has been received from Knapp to date.

12. Low Frequency Allocation. In Docket 02-93, which was resolved in May of 2003, our effort to obtain an Amateur Low Frequency (LF) allocation in either or both of 135.7-137.8 kHz or 160-190 kHz was stymied by FCC, due to strong opposition by the Utilities Telecom Council (UTC) because of claims of interference to Power Line Carrier systems operating under Part 15.

Since then, we refocused our efforts on an allocation near 500 kHz, and to that end have supported an extensive experimental licensing effort around the United States which is ongoing (largely for the purpose of establishing compatibility with other uses in the 495-510 kHz band). However, we are some ways from being ready to file a Petition for Rule Making on this band.

In the meantime, due to changes at WRC-07, it is timely to again seek an allocation domestically to implement the international allocation in the 135-137 kHz range. This is, however, going back for a second bite at the apple, after being unsuccessful some time ago. This will require an extensive and persuasive engineering showing, which apparently is being arranged now. This is a difficult sell domestically, in my view, and perhaps a more positive outcome will be achieved in the 495-510 kHz band. The timing of our efforts to obtain there two LF bands, or either of them, will have to be carefully evaluated so as to avoid having our efforts to obtain one not stymie the other.

B. Non-Allocation FCC Regulatory Issues.

13. <u>D-Star Classification</u> On February 6, 2008, we delivered a letter to Hollingsworth and Cross at the FCC, asking for an informal opinion about the proper classification of D-Star systems operated in a repeater configuration. While this letter was well-received and complimented by Hollingsworth, Bill Cross expressed some dissatisfaction with it and asked us to "restate" it.

We expressed concern that D-Star systems were being installed and operated in repeater configurations outside the repeater subbands, and in some cases operated without the proper frequency coordination. Past inquiries addressed to Bill Cross from one or more hams had resulted in some poorly reasoned definitional determinations by Cross that D-Star stations, which can be and most often are intended to function in a repeater configuration, are nevertheless not repeaters within the FCC definition because they do not "simultaneously" receive and retransmit communications on two separate frequencies. Our letter noted, in essence, that D-Star systems operated in a repeater configuration precisely meet the definition in the FCC rules:

> The definition of a repeater in Section 97.3(a)(39) is an Amateur station that simultaneously retransmits the transmission of another Amateur station on a different channel or channels. This is, as we understand it, the precise function of a station in a D-STAR system operating in a repeater mode. The fact that there is a small amount of latency in a digital system

does not alter the fact that the reception and transmission functions are occurring simultaneously.

Our position is directly contrary to the wishes of at least one California frequency coordination group which determined (apparently solely because of the dearth of available repeater subband spectrum, and what they perceived as the relative availability of spectrum in the segments in which auxiliary stations can be operated) that D-STAR stations are properly characterized universally as auxiliary stations. This interpretation was based exclusively on the premise that D-STAR stations can be part of a "network of cooperating stations." The auxiliary station definition in Section 97.3(a)(7), however, is considerably narrower than that; it identifies an auxiliary station as "[A]n Amateur Station, other than in a message forwarding system, that is transmitting communications point-to-point within a system of cooperating amateur stations." While D-Star can be configured as an auxiliary system, it is not properly defined as such when it is operating in a repeater mode.

Cross was not comfortable issuing the informal opinion we asked for, and he asked us to restate the letter as merely a statement of our interpretation. The Board decided last July that we would not restate our letter as Cross asked. I informed Cross of this. As the Board also ordered, I informed Cross that we wanted our letter asking for clarification of the classification of D-Star systems operating in repeater mode to be answered. He told me that it is not their plan to respond to our letter. However, it will in substance be responded to, and in a manner consistent with our interpretation, by means of a response to a letter from the Northern California Packet Association sent to FCC, which had concluded that D Star systems were in fact auxiliary systems. That letter was filed with FCC on December 5, 2007. Cross described that interpretation as "idiotic" and that the rebuttal of that interpretation will in fact conclude that D-Star systems operating in repeater mode are in fact repeaters (and therefore must be operated in the repeater subband, and should be coordinated). The FCC response letter is, he says, ready to release, but it is in the "front office" of WTB and apparently is awaiting approval of the Chairman's office before release. So, further delay may be expected for reasons discussed above.

14. Replacement of FCC Attorney-Advisor (Special Counsel) for Amateur Radio Enforcement. Since Hollingsworth retired July 3, we have been waiting a long time now for a replacement to be appointed. The determination was made within FCC that the job had to be posted and applications were solicited and received from both outside FCC and within the agency. The posting period was closed and a large number of applications were received. Subsequently, a hiring freeze occurred at FCC, which, we were told at the time, delayed consideration of candidates for this position.

We were also told that the selection of a candidate from the applicants from *within FCC* was made by Kathy Berthot, the Chief of the Spectrum Enforcement Division (Riley's former boss) and her selection was referred to the Chairman's office for approval. This, it turns out, was not exactly correct.

In any event, frustrated that nothing was happening, and because the Amateur press (other than ARRL) was making noise about Riley being gone and no enforcement being done (which was as counterproductive as anything that CQ magazine or other non-ARRL Amateur Radio press could have possibly done), we redoubled our efforts to get a replacement for Riley appointed. On October 31, 2008, President Harrison sent a letter to the Chairman and to the Chief of the Enforcement Bureau Kris Monteith, asking for expedited approval of Kathy Berthot's selection. The Executive Committee ordered that we move this to a very high priority status, so I attempted to obtain a meeting with the Chairman's office to lobby for a Riley replacement.

The Chairman's Office, to be blunt, stiffed me completely. Instead of a response from the Chairman's staff person in charge of wireless matters to my request for a meeting, I received a call from Kris Monteith, Chief of the Enforcement Bureau offering a meeting instead. Faced with no real alternative, I agreed to meet with her instead of the Chairman's office on December 11, 2008. The following is an excerpt from my memo to President Harrison and EVP Sumner about that meeting:

> I met with Kris Monteith, Chief, Enforcement Bureau; her deputy, Priya Shrinvasan, and George Dillon of the Enforcement Bureau, about Riley Hollingsworth's replacement. The meeting went better than I was anticipating. I had delivered to them in advance a copy of Joel's October 31, 2008 letter to the Chairman and to Monteith asking them to please hurry up with Riley's replacement; and three lists of pending enforcement matters, well-prepared by Maria, Dan and Ed (and Mike Gruber). My strategy, which Dave suggested, was to ask what ARRL could do to help expedite the process. This was because our understanding, received from inside FCC and corroborated by Riley as well, was that the appointment had been decided upon by the EB but that the Chairman's approval was not forthcoming.
>
> I had arrived at the conference room first, and the three EB people came in together. Kris Monteith was extremely friendly, a far cry from her attitude when Joel and I met with her and others about BPL interference cases before the Court remand. She began by thanking ARRL for its willingness to help with the DTV conversion. I told her it was a win-win for us and thanked George for helping structure this in a way that allowed ham clubs to do some community outreach and at the same time possibly showcase the value of Amateur Radio (and as well have some program material at club meetings). We discussed the fact that the program need not end on February 17, because there will be those who will need some help beyond the analog cutoff date (which may have about 30 days' slippage anyway, if a Senate bill passes).
>
> After some discussion of that program, I switched to the Riley replacement issue. I offered some history about the "dark times" of no Amateur enforcement, and the deterrence value, and the fact that in the 6 months since Riley retired, there has been noticeable deterioration in compliance in various respects. Because the essence and the value of the Amateur Enforcement program (which I described as a model of efficiency and success as an enforcement plan based on deterrence rather than imposition of actual sanctions) is the apprehension by licensees of an FCC presence, the absence of that apprehension voids the entire scheme.

So I asked what we could do to help the EB get this vacancy filled soon. Monteith responded that there was nothing that we could, or need to do at this point. She said that there was an offer extended to an individual (the name of whom she was unable to give me at this point, and I confirmed that it was not something we needed to know now) and that the offer had been accepted. There is, she said, NO roadblock to this person commencing work except the normal personnel office paperwork. She said that there were no necessary approvals lacking, and that the person, who she described as experienced in "our issues" including Amateur Radio in particular and telecom issues in general, would be starting in January. She said that the person would be doing "the same job" that Riley did, but that "no one can replace Riley". I asked her whether the person would be based in Washington or Gettysburg, and she unhesitatingly said "Gettysburg".

I told her that we had a board meeting scheduled for January 15 and a few days thereafter, and asked whether it was likely that the person would be announced by then. She said it was likely, but didn't know precisely. I asked her if she would notify me if the appointment was to be delayed beyond January 15 for any significant time period. She said she would do that.

Dillon said that while the person was indeed schooled in Amateur Radio issues, they wanted to know if they could have the person visit headquarters early on and discuss processes and procedures with HQ staff. They said they would pay for her/his travel expenses etc. I assured them that this would be accommodated, and the sooner the better.

Monteith reiterated that the job description was to be exactly Riley's; that the person would be working essentially full time on Amateur Radio enforcement. That was exceptionally good news.

Based on that meeting, it became apparent to me that the proposed appointee was one of two individuals, either Bill Knowles-Kellett, an attorney who worked with Riley in Gettysburg, but on land mobile radio matters (who I had figured did not want the job) or else Laura Smith, the former administrator of ITA (now EWA) who is now a practicing communications lawyer, associated loosely with a land mobile radio section of a Maryland law firm. I knew Laura briefly during her tenure at ITA. At one point early last year, Riley and Bill Knowles-Kellett called me to note that Laura wanted the job, and that they were both OK with that and that she would be fine for the job.. I thought the call strange at the time, and reflected that Bill didn't want the job himself.

Here is what apparently really happened: The appointment of Laura Smith was and is a *fait accompli*. She lobbied the Chairman's chief of staff, and the Chairman told the EB that it ***had*** to hire Laura. All references to other candidates was just for show. The EB did not want to hire her (they wanted someone else), but will follow through with the hire. There is some controversy about the circumstances under which she abruptly left ITA a few years ago, but no one that I know there will talk about it. Laura is alleged to have at one time made some remarks indicating a lack of support for the Amateur Service. My contact at ITA told me that he thought that she got the job because she is married to the son of former FCC Field Operations Bureau Chief Dick Smith, who we

liked reasonably well years ago. I think the more accurate reason is that she successfully lobbied the Chairman's office for the job.

EB wants us to host Laura when she takes the job, so as to educate her at HQ about Amateur enforcement matters. They will pay her travel expenses to visit HQ. We should do our best to establish a positive working relationship with her. I hope to have more details about the appointment by the time of the Board meeting.

15. WT Docket 03-187; Effects of Communications Towers on Migratory Birds. FCC is still trying to figure out how to deal with the February, 2008 Court of Appeals decision *American Bird Conservancy, Inc. et al., v. FCC***.** This case is related to, but is not a review of, the FCC's WT Docket 03-187, which addresses the effects of communications towers on migratory birds (and on which no firm action has been taken by FCC yet).

16. IB Docket No. 02-54, Mitigation of Orbital Debris. AMSAT's petition for reconsideration in this proceeding, now quite old, seeking to exempt Amateur Satellite stations from the obligation to incorporate an orbital debris mitigation plan in their applications or prior to launching Amateur satellites, is still pending. Meanwhile the new rules are in place, and they are effective now. As far as we know, no Amateur satellite application has been denied thus far due to the absence of, or submission of an inadequate orbital debris mitigation plan. However, the Docket 04-140 Report and Order did incorporate in the Part 97 rules the rules adopted in this proceeding.

17. ARRL Request for FCC Declaratory Ruling, Florida Statute Section 877.27 and New Jersey Statute C.2C:33-23, dealing with unlicensed radio transmissions and interference to FCC licensed broadcast stations. This state legislation would criminalize not only radio broadcasting without a license; it would criminalize interference with radio broadcast reception. The statutes are intended to deal with pirate broadcasting, but read literally, they would make it a felony to operate a radio transmitter, licensed or not, that interferes with broadcast radio reception. This would potentially make hams felons if their transmissions interfere with broadcast radio receivers. No FCC action has been taken on our February 25, 2005 Petition seeking an FCC Declaratory Ruling that the referenced Florida statute is void as preempted by the Communications Act. On January 13, 2006, the State of New Jersey enacted legislation identical to Florida's. On May 5, 2006, we amended our Declaratory Ruling request by filing a supplement asking for preemption of the New Jersey statute as well. The FCC continues to sit on this item. There are no cases so far of an Amateur being subjected to a misguided law enforcement action, or other local regulatory restriction, but perhaps it is just a matter of time. These statutes are unlawful on their face and should be preempted.

The Executive Committee ordered that we file a request to expedite action on this declaratory ruling, now more than three years old. President Harrison sent a letter to the Acting Chief of the Wireless Bureau, stating that the law-abiding, public service-oriented, licensed Amateur Radio operators in Florida and New Jersey should not be threatened with felony prosecution in the event that their transmissions inadvertently interfere with one or more broadcast receivers of unspecified quality or interference susceptibility.

After three years, Joel said that we frankly expected that this issue should have been resolved. It is not a difficult matter, and merely requires explanation of longstanding and very clear Commission policy.

Perhaps due to President Harrison's letter, there has been a response prepared to our request and it will be released following WTB "front office" approval. I don't know the contents of the response, but Cross did mention something to the effect that the response mentions that there have not been any Amateur Radio enforcement actions in either State premised on either statute. That, of course, is wholly irrelevant to the preemption status of these overbroad statutes. The FCC may have decided to try to split the baby here and let the statutes stand, but find that they are not properly applied to radio interference matters unless they involve unlicensed broadcasting stations. That would be a copout, but we will see. Another item on hold pending Chairman's office release authority and prior action on other FCC items deemed more important.

18. RM-11325; Petition re automatic power control of spread spectrum transmissions. This ARRL petition was filed March 13, 2006. It was placed on Public Notice by the FCC on April 3, 2006 and public comments were due by May 3, 2006. ARRL timely filed reply comments only, on May 18, 2006. There was a larger than expected number of comments in opposition to the Petition, but there were some supporting comments as well. A total of 36 comments were filed.

This is finally ready for release by the Wireless Bureau. The Mobility Division staff drafted this as a Notice of Proposed Rule Making (as a stand-alone item) and it is in the "front office" of the WTB for approval (apparently of the Chairman's office). The release date is uncertain.

19. Amateur Radio Equipment Authorization. On November 1, 2007 I filed a letter with the Office of Engineering and Technology at FCC addressed to the Chief, Julius Knapp, stating our views on the extent to which Amateur Radio equipment which could also be considered to be either Class B digital devices or Computer peripherals is subject to FCC equipment authorization requirements. This issue is important because it affects many of our smaller advertisers and the manufacturers of amateur station accessories such as wattmeters and keyers. This was a followup on a meeting that I attended on February 17, 2007 with OET, OET Laboratory Division, and OET Compliance Branch staff, and Enforcement Bureau staff.

The letter is a result of an understanding that we reached with Knapp at that meeting. Knapp asked us to set forth in a letter our interpretation of the equipment authorization rules applicable to Amateur Radio station ancillary equipment, and the applicable requirements for Amateur Radio equipment (other than transmitters and receivers). Our assumptions were that the equipment is marketed solely to radio amateurs and is used and intended for use by licensed Amateur Radio operators, but which, otherwise, would be considered to be Part 15 devices subject to grants of equipment authorization..

We are still waiting for OET's response to the November 1, 2007 letter. I contacted Knapp in November of 2008, and he acknowledged that OET owed us a response and agreed to try to move that along. Not getting an answer is not entirely a bad outcome here, however: Since the Enforcement Bureau is holding off on any enforcement proceedings on ancillary Amateur Radio equipment pending resolution of this matter. So, the status quo is not entirely bad, but it does leave our equipment manufacturer advertisers in limbo.

20. Changes in CEPT license reciprocity and Table of Equivalencies and effect on U.S. General and Technician class licensees; Revised FCC public notice and status of request for same; ERO Letter to FCC. In June of 2008, we sent a letter to Scot Stone at WTB's Mobility Division, requesting the preparation and release of an updated Public Notice regarding Amateur Radio Service operating privileges for United States citizens who are Amateurs and who operate Amateur stations temporarily in a CEPT country pursuant to the terms of CEPT *Recommendation T/R 61-01 (as amended).* The most recent version of the Commission's Public Notice that requires updating is DA 99-2344, released October 29, 1999.

Pursuant to the CEPT *Recommendation* , some United States Amateurs may utilize temporarily an Amateur station in a CEPT country that has implemented the recommendation with respect to the United States. All that is required for such operation outside the United States is that the United States licensees retain a copy of the FCC Public Notice, proof of U.S. citizenship, and evidence of the FCC license grant in the Amateur Service. *In the past*, licensees holding Technician, General, Advanced or Amateur Extra class licenses were entitled to operate under the CEPT Recommendation, and the Commission's October 29, 1999 Public Notice so states.

However, CEPT revised its longstanding table of equivalence between FCC Amateur licenses and the CEPT license. Effective February 4, 2008, *Recommendation T/R 61-01 (as amended)* now grants full CEPT privileges *only* to those U.S. citizens who hold an FCC-issued Amateur Extra or Advanced Class license. U.S. licensees who hold a General or Technician Class license are *no longer* eligible for full operating privileges in countries where CEPT-reciprocal operation had previously been permitted. U.S. General and Technician Class licensees would qualify for CEPT Class 2 privileges but *only* in those countries that have implemented CEPT Class 2, and only if the United States agreed to the Recommendation, which the United States has not done to date. No changes were made affecting U.S. Novice class licensees, who do not have and have never had any reciprocal privileges under the CEPT Recommendation.

As part of the CEPT reciprocity process, and pursuant to the terms of the Public Notice, US amateurs are required to carry with them a copy of the Public Notice, DA 99-2344, released October 29, 1999. As the result of the recent changes to the CEPT Recommendation, the Public Notice is materially incorrect and misleading. We asked that the Commission update the Public Notice to reflect the February 2008 changes in the CEPT reciprocal arrangement. In addition, three additional countries – Macedonia,

Poland and the Ukraine – are now signatories to the CEPT Recommendation and should be included in the list of participating countries.

We were told some time ago that the new PN was drafted and waiting for approval to release. The Chairman's office, however, has to approve all PNs. The acting Bureau Chief, Schlichting, is focusing on items that are, we are told, of higher priority for them. Schlichting is in an acting role and is not likely to undertake any initiatives. This draft has, therefore, been sitting in the review process for months. Meanwhile, U.S. amateurs are operating under incorrect premises in foreign countries.

I had a meeting December 5, 2008 with Cross and Stone of the Mobility Division. This was necessary for two reasons. There was a misunderstanding about what privileges Technician and General class licensees have after February of 2008. I explained to them that U.S. General and Technician Class licensees have no privileges when operating in CEPT countries now, and that what had happened was due to CEPT revising its table of equivalences. What happened in early 2008 was that the CEPT table of equivalences was revised such that (1) U.S. Advanced and Extra Class licensees were entitled to full CEPT license privileges; (2) U.S. General Class licenses were found equivalent to the CEPT Novice Radio Amateur License [ECC/REC/(05)06]; and (3) U.S. Novice and Tech licenses were not found equivalent to any CEPT license and those licensees would not be able to have any operating privileges in CEPT countries at all.

The problem now is with respect to General Class licensees. According to the letter to FCC from the European Radiocommunications Office (ERO) dated February 8, 2008 (which was addressed merely to "Federal Communications Commission" from Mark Thomas, the ERO Director), because CEPT had revised the *T/R 61-01* table of equivalences; and because the U.S. General Class licenses were found to be equivalent only to the CEPT Novice Radio Amateur License [ECC/REC/(05)06] which is described in Appendix III; and because the United States has not agreed to join ECC Recommendation (05)06, United States' General Class Amateur licensees are not able to operate in CEPT countries now at all (unless the United States has a separate bilateral agreement with any of those countries that is still in force providing otherwise).

The ERO letter's method of dealing with this was to invite the United States to "consider joining the ECC/REC/(05)06 on 'Novice Radio Amateur License' with its General license class" by its letter of February 8. Therefore, the second issue of the December 5, 2008 meeting was to address the FCC's non-response to that letter; to recruit the Mobility Division as allies in the effort to obtain a positive response to the letter; and to see where else we need to bring pressure in order to make this happen.

The staff was sympathetic, noting that they had (1) drafted the revised notice last June; (2) gotten the approvals of the WTB "front office" but that the "front office" felt that they could not release it without the approval of the Chairman's office, which wasn't forthcoming; and (3) tried themselves to get the Chairman's office to respond, but without success. The impasse at the Chairman's office is virtually impossible to

penetrate, according to Stone, and he assured me that he views the delay in releasing the revised notice as being as unconscionable as we do.

That said, when we discussed the ERO letter, Stone was concerned that a favorable response to the ERO letter would change the Public Notice yet again, and he didn't want to get that Notice updated and on the street if it was going to change right afterward. So, they asked me to give them two weeks to resolve with the International Bureau how FCC would handle the ERO letter. They thought that it would have to be addressed by the State Department.

However, Stone agreed to advocate this to the International Bureau. He did this, and reported back to me in December that IB had written ERO, asked them to restate the letter and send it to a specific person at the State Department, and that State would timely respond. Stone said he was still working on getting the revised PN out right away, but it would say that Technician and General Class Amateurs have no privileges in CEPT countries. We hope that at some time in the near future, General Class licensees will be able to operate in CEPT countries using CEPT 2 privileges (the CEPT Novice license).

II. Antenna and RFI cases.

There has been a notable spike in antenna regulatory matters since the last Board meeting. These include adverse antenna ordinances in Southern California (Palmdale, California and San Diego, California); state PRB-1 Legislation (most notably in Pennsylvania) and in antenna litigation (Palmdale, California again).

The Palmdale, CA Antenna/RFI case is ongoing, litigation having been filed in February. The City of Palmdale caused the revocation of the "vertical antenna" permit issued to Alec Zubarau, WB6X (and EW3AAD, originally from Belarus) for an antenna support structure at his owned residence in Palmdale. He had a permit issued in March of 2005, and in 2006 apparently put up a SteppIR yagi which invaded the 10 foot setback by three feet. His neighbors claimed interference. He never mentioned the yagi in the original building permit application, but it is arguable that he didn't have to. Fred Hopengarten wrote a very good brief for this administrative appeal, but it was denied. The case is being handled *pro bono* by competent California counsel and ARRL has agreed to make a grant to cover litigation costs up to a maximum of $5,000.00. .

The real problem is the City's order, which reads, in part, as follows:

> Based on the findings and conclusions set forth in paragraphs 1 and 2 above, this Commission hereby revokes Zoning Clearances for Single Family Minor Modification 05-139 and Single Family Minor Modification 05-304 related to the installation of vertical antennas for a ham radio use located at 39303 Dijon Lane. Further, the applicant is ordered to cease and desist all operations of the radio use and to remove all Vertical Antennas no later than 14 days from the date of this Resolution.

The City of Palmdale believes that it can cause Alec to stop transmitting with his FCC-licensed Amateur Station, and the reason for that was the neighbor complaints of interference (all of which were unverified).

The most important aspect of this case is that Palmdale believes that it can regulate and prohibit RF interference. That was a part of the basis for the revocation of the building permit post hoc. Because this case is being litigated, apparently as a strategy, Palmdale has proposed a new ordinance that is, in the words of veteran antenna lawyer Jim O'Connell, W9WU, the "worst ordinance he has ever seen in his years of law practice". Coming from Jim, that says a lot. We wrote to the City Attorney about the proposed ordinance, as a means of establishing that the City is on notice of its Federal obligations and limitations.

The City of San Diego has also proposed a completely objectionable ordinance which, as a practical matter, would prohibit all antennas over about 35 feet in the City. We have written a similar analysis of the problems with this ordinance as well, and sent it along to the City Attorney, the Mayor and other City officials. Kudos to Marty Woll on his work with the Palmdale and San Diego matters. Marty has orchestrated a very well-organized Amateur approach to these two ordinances.

Pennsylvania PRB-1 Bill, Act 88, now enacted. This legislation, which passed the Pennsylvania House and Senate the first year it was attempted, was interesting in several respects. It has become the 27th state "PRB-1 bill" enacted around the country. We are now just past half of the states that have implemented such legislation.

This is interesting also because, like only a few other PRB-1 statutes, it includes a minimum height below which municipalities cannot regulate. In this case, 65 feet is the minimum. This was the focus of much debate, and some negotiation with the Township Supervisor's Association. Atypically, this office was involved in much of that negotiation. As it turned out, the investment of time and ARRL resources paid off, but that is not likely to be true across the board. The SGLs are typically the movers and negotiators in this process, and in the future, it is probably a task best performed at the Section or Division level, though of course we should be of as much assistance as the SGL calls for in the process.

Pennsylvania was somewhat unique in that the prime force here was Senator Greenfield of Pennsylvania, who felt an obligation to a constituent who was a ham and a friend of the Senator. The Senator assigned a very enthusiastic staffer, one Eric Pauley, to this process, and Eric took it on himself to sell this bill in the State Senate. He did yeoman's service on this, working through killer amendment proposals, and some stiff opposition from the Township Supervisor's association. There was a lot of resistance to the 65 foot minimum height specification, and Eric required a lot of hand holding and education about the need for antenna height. The good work of the two SMs in Pennsylvania drumming up grassroots support on this was spectacular, however, and as a

result, the votes were overwhelmingly favorable to the bill and it passed with almost no opposition and without crippling amendments, in both houses.

III. Other Legal Matters.

There are numerous, routine legal matters in which this office participated in the past six months, including registration of new trademarks for “Logbook of the World” and “LoTW”, and I worked closely with Barry Shelley on an estate matter in which ARRL was a beneficiary.The American Red Cross Background Check matter remains challenging, and we are still without a new MOU/SOU with the ARC as the result.

I have had an initial organizational meeting with Brennan Price and Jon Siverling of the ARRL Technical Relations office in Virginia. We are collaborating on projects, as was the case with Paul Rinaldo. I hope that we will have as close and mutually supportive relationship as has been the case in the past, and I look forward to a closer interrelationship among the various components of the ARRL’s Washington “team” so that there is ample coordination of important advocacy activities. We need, I believe, to continue the “team” concept that was so well developed during the tenure of our dear friend George Wilson, W4OYI (SK).

These and other matters, as necessary, can be discussed at the meeting at the pleasure of the Board. It remains my greatest professional privilege to serve the ARRL Board of Directors. Thank you for the opportunity to continue to do so.

Respectfully submitted,

Christopher D. Imlay

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Christopher D. Imlay
General Counsel