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REPORT OF THE GENERAL COUNSEL TO THE BOARD OF DIRECTORS

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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 January of 2010 in Windsor. 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 Legal and Regulatory Matters (some observations).

It has been a very busy six months on the legal and regulatory front since the Board last met. I have repeated in my memos to the Board that broadband (however defined) is and has been "King of the Hill" at FCC and in Congress. That continues, and in fact it is a freight train that is accelerating. Dave Sumner's Board report notes that *so far*, the Amateur Service seems to have escaped relatively unscathed in FCC's scramble for mobile broadband spectrum between about 225 MHz or so and about 3.7 GHz. With one exception, that is correct. It is surprising, though, that we are doing so well when other radio services, such as the Television Broadcast Service, are being hit pretty hard in the name of the almighty broadband and the perception of a mobile broadband spectrum shortfall of gargantuan proportions.

The National Broadband Plan (NBP) developed by FCC (largely, incidentally, by FCC contractors, rather than FCC staff, which reportedly did not sit well with the FCC staff) was released to Congress in March. It calls for 500 MHz to be made available within ten years for broadband, of which 300 MHz should be within the segment 225 MHz to 3.7 GHz, and made available within five years. Recommendation 5.8.5 of the NBP is that the FCC should institute a rulemaking to reallocate 120 megahertz from the broadcast television service for mobile broadband *due to propagation characteristics of that spectrum*. This is an important reference for us, and perhaps a harbinger.

The NBP uses a "value of spectrum" metric for determining what spectrum should be reallocated for mobile broadband. The demand for mobile broadband is escalating at a tremendous rate, says the Commission.

In mid-April, Congress passed H.R. 3125, the Radio Spectrum Inventory Act, which provides for an inventory of spectrum between 225 MHz and 3.7 GHz within one year of passage, including assessment of the spectrum efficiency of each incumbent user in that segment. That, of course, would include the Amateur Radio Service.

Most recently, President Obama signed a Presidential Memorandum on June 8, 2010 entitled *Unleashing the Wireless Broadband Revolution*. This committed the federal government to find an available 500 MHz of federal and commercial spectrum over the next 10 years for reallocation to broadband. That document and fact sheet that accompanied it essentially endorsed the entirety of the NBP. The President said that the reallocated spectrum will foster investment, economic growth and help create hundreds

of thousands of jobs by meeting the "burgeoning demand" for mobile and fixed broadband, other "high-value uses" and benefits for other industries. Currently, wireless companies have about 534 megahertz allotted to them. That number will almost double in the next ten years, apparently. The White House said the reallocation of spectrum would be voluntary, employing tools such as proceeds of spectrum auctions to compensate those who agree to relinquish their "unused or under-used" spectrum. According to the Fact Sheet distributed by the White House about the *Memorandum*: "The Administration has no official estimate of the auction revenues from this plan. The actual amount will depend on effective implementation and additional design details, but based on past auctions, many analysts believe the revenue potential could reach in the tens of billions of dollars. The proceeds would be invested in public safety, additional job-creating infrastructure investments *and deficit reduction*." So, the reallocation of spectrum for mobile broadband is on a huge roll because of the need for mobile broadband spectrum *and* deficit reduction. Amateur Radio allocations don't stand much of a chance in the face of these justifications. Nor do those of other incumbent services. Nothing is sacred.

However, I had an e-mail exchange recently on another subject entirely with our friend Fred Moorefield, the Department of Defense IRAC representative who we have been working with on the Pave Paws matter. I casually asked him, somewhat in jest, to please protect Amateur spectrum in the course of the broadband reallocations. He responded very seriously that in his view, Amateur Radio spectrum is safe for now, but the same could not be said for *other* spectrum that DOD uses between 225 MHz and 3.7 GHz. Good news for us, if Fred is right, but bad news for DOD.

How have we been affected so far? Well, directly, in only one respect. Discussed in detail further down in this memo, the FCC released on May 20 of this year a Report and Order in WT Docket No. 07-293, a Docket that has been around a long time dealing with service rules for the "Wireless Communication Service" (WCS). The bands allocated for this *fixed* wireless service are and have been 2305-2320 and 2345-2360 MHz bands. WCS therefore overlaps the secondary allocation for Amateurs at 2300-2310 MHz. The FCC in 2007 coupled this with older dockets dealing with Satellite digital audio radio service (SDARS) which is now the merged Sirius and XM Satellite Radio companies. The FCC did not release any NPRM in this docket. This order was simply issued as a means of expanding the authorization to use this spectrum for mobile broadband.

The FCC decided to kick off its broadband reallocation by making 25 MHz of WCS spectrum available for mobile and portable stations (read mobile broadband) at power levels up to 250 mW EIRP per 5 MHz in WCS Block C (which includes 2305-2317.5 MHz). The Report and Order acknowledged that Amateurs use the 2300-2305 MHz band on a secondary basis for weak-signal communications using "highly sensitive receivers and high gain antennas in order to receive very weak signals." They also acknowledged that just below 2300 MHz is the NASA Deep Space Research segment, which must be protected. Indeed, it is because of this DSN network that Amateurs at 2300-2305 MHz *have been* protected, and in general why we have been able to do weak signal operation at 2304 MHz in an nice quiet RF environment. But the FCC, tripping

over itself to get started chipping away at that 500 MHz reallocation obligation of the NBP, wanted the first 25 MHz in hand right away, and the 2.3 GHz band was low-hanging fruit. So FCC said, about us (completely forgetting in the Report and Order, by the way, that we still have secondary access to 2305-2310 MHz) in footnote 405, as follows:

> We note that some amateur stations operating around 2304 MHz may experience an increased antenna noise temperature caused by the implementation of mobile WCS operations, and will have to tolerate this change in the RF environment. Due to the technical flexibility allowed to amateur stations in Part 97 of our rules, however, we believe that operators of these stations may be able to offset or mitigate the effects of this change by relocating or redirecting their antennas, or by making other permitted technical adjustments.

Does this sound familiar? This is the same thing they said about how Amateurs might best handle BPL interference at HF! FCC adopted new Out of Band Emission limits based on the new mobile rules it adopted. Right now, the FCC has not yet published this in the Federal Register, so we will have at least 30 days from now (July 10) to file a petition for reconsideration, if the Board or the EC decides to do so. Brennan Price and Ed Hare are looking this over now for points to argue. But it is very difficult to stop the broadband freight train, and FCC has already been bragging about the fact that they have "unleashed 25 megahertz of mobile broadband spectrum." Telling them that they can't do this if it causes increased noise at 2304 MHz is a tough sell indeed.

The point of this discussion is that this is a revolutionary period in domestic spectrum allocations. We cannot expect to come through this unscathed. Our 2390-2400 MHz band is in serious jeopardy, as but one example, because we don't use it. Even if we did, it might still be in deep jeopardy. Let's be vigilant as this process unfolds in the next few years.

During the six months since the last Board meeting, the floodgates opened on FCC actions, some of which were long-pending and long overdue. Most of this is a positive reflection on the current FCC; they are clearing out the backlog that was left them by Kevin Martin's failed FCC administration.

Continuing a theme from 2009, FCC Rule Section 97.113(a) is by far the "issue of the day." I must confess that the Board surprised me at the last meeting. I would have thought that the Board would urge no change to the rule prohibiting communications "on behalf of one's employer." However, I must say that upon setting about "selling" the Board's plan, it really is a good, balanced approach, and it has been something of an easy sell at FCC, or so it appears so far. We have at once been able to argue to the FCC that the prohibition of communications on behalf of one's employer, heretofore an absolute prohibition, though rooted firmly in good policy intended to protect Amateur Radio licensees from pressure from employers to exploit the service and which protects the non-commercial character of the Service, should be subject to a very limited exception to

facilitate emergency communications. While we may or may not be successful in advocating the Board's specific language, Mr. Sumner and this office have done an aggressive job of attempting to do so thus far. Unfortunately, the comments in Docket 10-72 reveal that there are entities waiting for opportunities to exploit Amateur Radio where other radio services were intended to be and should be used. Too often as well, many radio Amateurs, selfless and well-intentioned, are willing to be exploited themselves . The real risk, therefore, regardless of whether the FCC proceeds with the proposed rules in Docket 10-72 or ARRL's version, or some other proposed language, is that Amateur Radio can be, and if we allow it, will be exploited by businesses and other entities seeking a cheap alternative to expensive land mobile or personal wireless service radio systems. Dave Sumner and I have assured the FCC that we will be preparing some educational efforts to suggest proper private sector limits on business communications. It is quite necessary that we follow through on this commitment.

I want to thank the Executive Committee for being increasingly responsive and creative in helping conceptualize and plan FCC filings and in careful stewardship of those filings we have made in the past six months. The Committee has been asked for well more than usual in this capacity and it has performed admirably.

This report is a bit later than usual. I apologize, but I have spent an inordinate amount of time in the last three weeks preparing and filing a brief *Amicus Curiae* on behalf of ARRL in an antenna case called *Alec Zubarau v. City of Palmdale, California* now in the California Court of Appeals (discussed below). I have kept the Executive Committee up to speed about this.. We are not sure that this brief will be accepted, but we are hopeful that it will be. If not, it will be useful in other contexts instead. I am grateful for a good deal of assistance in putting the brief together from Cliff Ahrens, Marty Woll, and most especially Volunteer Counsel Len Shaffer, WA6QHD of Tarzana, California, who I was very fortunate to get to know while in Santa Barbara, California last year at the Southwestern Division Convention. A tireless volunteer and a skilled and fearless career litigator (and one of the most instantly likeable guys I have met in a long time), Len is offering us the "last best chance" of a court decision that might offer hope to other hams of getting attorney's fee awards in successful antenna cases. I will be happy to send you our amicus brief electronically if you wish one, and I have a limited number of hard copies left over that I will bring to the Board meeting to hand out.

B. FCC Spectrum Allocation Issues.

1. Broadband Over Power Line (BPL) regulations (ET Docket 04-37). Further Notice of Proposed Rule Making.

The FCC has not taken any action on this matter since the last Board meeting. BPL is all but dead as a broadband delivery mechanism, but on a regulatory basis, the issue is still languishing. We filed on January 11, 2010 an extensive rebuttal to Current Technologies' ex parte "Supplement to the Record" filing. Armed with Ed Hare's excellent technical studies, we extensively rebutted Current's argument that 40

dB/decade is a scientifically valid extrapolation factor. Current had argued that, since ARRL urged 20 dB/decade and Current had urged 40 dB/decade, the FCC's "King Solomon" approach, proposing 30 dB/decade made some sense. Insisting on scientific integrity, however (something lacking in FCC technical rulemaking of late), we again illustrated that 20 dB/decade is the valid number outside the reactive near field range. We also showed that 35 dB notches, if implemented full time, would fix this problem and let ARRL get out of the way.

Dave Sumner and I discussed this with OET when we met with them in early February about other issues. At that meeting, OET Deputy Chief Bruce Romano, no friend of ours on this issue, when hearing our argument for full time, all Amateur band 35 dB notching as a regulatory obligation, asked if we had documented in the record our claim that such is in essence the industry standard. In fact, we hadn't done that very effectively, though it was not a matter that the industry disputed. We took from Romano's remark that if we had any expectation that FCC would require full time 35 dB notching of Amateur bands in the BPL rules, we had better document this.

Ed Hare prepared a draft of such documentation but it is not complete from his perspective and we have not yet filed it. It does not precisely show that 35 dB of notching is the industry norm, which seems to be closer to 30 dB of notching.

An active BPL interference case that we had hopes to document in southwestern Virginia proved not useful after some investigation by Ed Hare. However, what was discovered was that IBEC, a BPL company, which we had thought all along was doing full time notching, apparently was and is not doing so. IBEC is not notching the ham bands universally. They are attempting to notch near fixed amateur stations that formally complain. There are some local hams that just don't want to go through all that hassle. But driving down the road, any time the power lines were within a few hundred feet of the road (not always the case, especially on the smaller roads), interference to Amateur Radio was at least tens of dB degradation and typically S9 or more across the entire band.

The "National Broadband Plan" does not include any plan for BPL deployment. That is good news. But it has diverted all attention from any resolution of the BPL docket, and since FCC is interested in what IS going to help further broadband rollout, they are not at all interested in restrictions on technologies that are NOT going to contribute to broadband. So likely, this docket will languish longer. We filed our comments on September 23, 2009 and reply comments on October 8, 2009, so it will soon be a year that the FNPRM will have been out. Due to the diversion of attention by other pending FCC dockets of timely interest to Amateur Radio, we have not followed through with plans to more fully argue one major issue in this docket: the inadequacy of the 40 dB/decade distance extrapolation factor We have come up with a valid justification of a factor closer to 20-25 dB/decade, if a more accurate sliding scale is not to be adopted by FCC. Ed Hare's argument is overwhelmingly persuasive. Nevertheless, FCC is likely not prepared to adopt a factor lower than the 30 dB/decade it has proposed in the FNPRM, The NTIA Phase II study offers a justification for retaining 40 dB/decade, but "cooked

the books" in order to get to their justification. Ed still wants to rebut that but he is still working on a more complete rebuttal to for filing with FCC as an *ex parte* submission.

Finally, a different, perhaps more virulent form of BPL is on the far horizon. A future PLT/BPL system operating between 80 and 200 MHz is a carrier-current system, standards for which were approved by ITU-T, the telecommunications sector (rather than the radio sector) of ITU. Unfortunately, given the genesis of this standard, there are no interference parameters or criteria for it. It would operate between 80 and 200 MHz, which of course includes the 2 Meter band. We mentioned this as a preliminary concern to OET when Dave Sumner and I met with them in early February. It is referred to as "G.hn" and would operate in many of the same bands that FCC protects very carefully against cable signal leakage from cable television systems. That being the case, there is no reason to have differential treatment of the two sources of interference to, among other things, public safety systems. Our position is that, if the concept goes anywhere, it should be regulated to the same standards as are closed cable systems under Part 76. FCC OET is well-aware of the fact that 2 meters is our "Holy Grail" and while they were not very familiar with this, we were well-advised to give them a briefing about it.

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

While this matter continues to be a serious threat to continued Amateur Radio 70 cm operation in, at least, Massachusetts and northern California, it may be that the presence of Pave Paws systems and their importance for homeland security purposes may be the saving grace for the 420-450 MHz band relative to the National Broadband Plan onslaught.

There is little to report on this subject since the last Board meeting. Dan Henderson and Ed Hare continute to work with the Air Force to minimize the effect of the protection requirements of the two radar sites on local Massachusetts and Northern California repeater systems. The relationship between ARRL and the Air Force is good, but there is increasing evidence of frustration, and resultant non-cooperation by certain repeater owners in California that is disquieting. Dan has taken an increasingly active role in urging complete cooperation with the interference mitigation requirements on the part of the repeater owners, while Ed Hare continues his vigilant analysis of the Air Force's monitoring efforts to make sure that interfering repeaters are properly identified and that they mitigation is the minimum necessary to protect the Pave Paws radars. It seems to be a proper balance of ARRL involvement going forward.

3. Expansion of 5 MHz Band Operating Privileges; RM-11353; ET Docket No 10-98.

There is finally some action on this matter. The FCC issued a Notice of Proposed Rule Making on May 7, 2010 based on ARRL's Petition for Rule Making, filed on October 10, 2006. The notice, relative to Amateur use of the five channels allocated in the 5 MHz band, proposes (as did our Petition): (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. There were a few unexpected items in the NPRM however, which required some extensive ARRL comment.

The Executive Committee met by telephone on July 1 and developed a plan for comments, due July 14. As to the proposed substitution of one channel for another, that was our proposal and we support it. The same is true with the proposed power increase from 50w to 100w ERP.

There are some who thought that additional modes besides USB, 60H0J2B (e.g. PSK31), CW, and 2K80J2D (e.g. PACTOR-3) should be proposed. However, our deal with NTIA was for these specific emission types. We urged that the FCC Rules should indicate emission types,not mode names such as PACTOR-3. The troublesome issues in operating in this band are that (1) Amateurs must be able to clear a channel fast if federal users need to use it, (2) channel-hogging by Amateur users of any particular emission type must be discouraged; and (3) hams must be educated about what the emission designators mean. ARRL has commited to strong educational effort to minimize the chances of conflict with Federal users, and avoiding conflict among Amateur users of various emission types, and to inform hams what the emission designators mean. The EC was concerned that habitual failure to listen before transmitting on non-voice modes will lead to trouble with Federal users. We stated to the FCC that we prefer to rely on education and bandplanning rather than inflexible FCC regulatory restrictions on which modes can use what channels. Hams must be convinced that irresponsible operating will lead to loss of the channels and also destroy our chance of ever getting a band allocation in lieu of individual channels.

The FCC proposed to allow CW and PSK31 to operate only on center frequency (i.e. one emission per channel at a time). This was counter to our understanding with NTIA in 2006, and we argued that restricting these narrowband modes to one QSO per channel at any given time is a poor use of spectrum. We committed, again, to educational effort to ensure that hams have the information we need in order to operate responsibly, as we did with USB when the channels were first granted.

We opposed a time limit for data transmissions. We promised to educate hams about the importance of keeping transmissions short and listening before transmitting.

FCC asked, but did not propose to require hams to be equipped to utilize Automatic Link Establishment (ALE) on these channels. We assumed that this means digital selective calling, not data transmission. ARRL did not take a position at this point on whether the FCC should “encourage” hams to be capable of using ALE [thus to be able to communicate (on an interoperable basis during a disaster) with FEMA, for example]. Reply comments may be needed on this topic, depending on the comments of others.

FCC also asked, but did not propose to require, about the use of VOX operation on SSB on these channels. The EC decided that VOX is but one of several possible

means of keeping transmissions short and ensuring that Federal users can grab a channel if they need to use it. ARRL had agreed to VOX as part of the deal with NTIA for increasing the power limit, which made our comments a bit delicate on this subject, but the FCC noted that in a noisy environment ,VOX can be triggered and in fact increase interference potential to Federal users. A rule requiring VOX is unenforceable; we do not support unenforceable rules. Without reneging on our discussions with NTIA, we argued that VOX should be one of several options but not a requirement.

Finally, our comments included a reference to our desire for a traditional band at 5 MHz, which is currently opposed by NTIA. Although this is unlikely to be granted in the near future, we want to be on record as still favoring a band. In fact, having a band rather than discrete channels would make for greater regulatory simplicity and, we said, would make it easy to avoid interference by moving a VFO quickly.

The EC decided that ARRL will have to develop a band plan and a set of best practices for 5 MHz and engage in a strong educational effort to achieve cooperation, as we have now promised to do. Some discussion of the negative consequences of overly-aggressive operating may need to happen between the ARRL and leaders of the Winlink network and possibly also with influential leaders of other mode communities. Individuals who operate irresponsibly may be brought to the attention of FCC, if peer-pressure (including OO notices) fails.

We will evaluate the comments filed after the Board meeting and see about reply comments, which would be due July 30.

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 frustrating, but we have dealt with it as best we can. It is frustrating in terms of the FCC's approach to it and the precedent value of the decision, but not so much in terms of actual interference potential to Amateur Radio. FCC issued an *Order* February 23, 2010 in this Docket which granted a request filed by ReconRobotics, Inc. for waiver of Sections 90.101, 90.207, and 90.209 of the Commission's Rules to permit equipment authorization and customer licensing under Part 90 for the "Recon Scout". This is a remote-controlled, maneuverable surveillance robot designed for use in areas that may be too hazardous for human entry. FCC granted the waiver request over ARRL's strenuous opposition in comments, and that of dozens of radio Amateurs and Amateur groups. The waiver is subject to certain conditions, but generally permits the marketing, sale, licensing and use of the device to transmit short-range surveillance data in the 430-448 MHz segment of the 420-450 MHz band.

The Executive Committee authorized the filing of a broad Petition for Reconsideration, which was filed March 24, 2010. We filed a reply to ReconRobotics' Opposition to our Petition on April 16, 2010. While the chance of a substantial reversal of the Commission's position here is *extremely poor*, the chance of obtaining minor, necessary modifications of the waiver conditions -- at least with respect to labeling of the

devices -- seem quite good. Because this waiver grant represents bad spectrum management decisionmaking in numerous respects discussed below, the Commission should be discouraged from taking similar action in the future. Finally, the EC decided that aggregate Commission actions with respect to 420-450 MHz, if continued, stand to seriously compromise Amateur access to this secondary allocation in the future.

To refresh your recollections, the Recon Scout is a mobile robot for black & white 30 frame-per-second NTSC video surveillance of dangerous environments. It can be thrown or dropped into the target area and can be maneuvered by an Operator Control Unit ("OCU") operator at safe distance up to about 250 feet. Physically, the robot resembles a barbell of just over 7 inches in length with wheels on each end having a 3-innch diameter. It has two antennas and a stabilizing tail so the image sensor is horizontally oriented. The OCU is a handheld device with transmit and receive antennas. It was developed by the University of Minnesota with funding from the Defense Advanced Projects Agency (DARPA). It was clearly developed for use in Iraq with obvious applications there. The choice of frequency band was purely because of the allocations situation applicable to its use *outside* the United States. ReconRobotics wanted the waiver so that it wouldn't have to reconfigure the device to operate in a more appropriate band, such as 902-928 MHz or 2450-2483.5 MHz, or the 700 MHz public service allocation. Reconrobotics argued that the 430-448 MHz band was chosen because it had better propagation through building materials where it would be deployed than at higher frequency bands where such devices are permitted under Part 15 of the FCC rules. That, however, was pure sophistry.

Electronically, the system operates "full duplex," i.e., using two frequencies: Telecommand transmission from the OCU to the robot is on 75.57 MHz; video transmissions from the robot are on a choice of three 6-MHz wide channels, namely 430-436 MHz, 436-442 MHz and 442-448 MHz. The transmitter output power of the robot device is 250 milliwatts.

ARRL had, in comments, made the following points:

1. Because there is **no** domestic allocation for Public Safety land mobile services in the 430-450 MHz band, and because the three channels on which the device is proposed to operate are all within that segment, what was requested was not only a waiver of Part 90 service rules, but also a waiver of Section 2.106 of the Commission's Rules, the table of allocations.

2. The Commission should refrain from making spectrum allocations by waiver. Doing so short-circuits the procedures for international and domestic frequency allocations and spectrum management, which involve compatibility showings, and consideration of the impact of a new service on incumbent licensees. Making spectrum allocations by waiver is manufacturer-specific, which is inherently unfair to other manufacturers and frustrates competition.

3. ReconRobotics' proposal can be properly evaluated only in light of a complete technical compatibility showing, which was never provided.

4. ReconRobotics submitted no technical specifications for the device; no frequency stability information; no emission designator, no necessary bandwidth information, no antenna gain information, and only the most rudimentary technical data about the device. So, the waiver request was deficient, and not grantable. The Commission is required to take a "hard look" at waiver requests. It could not and did not do so with this device.

5. ReconRobotics failed to establish that the 420-450 MHz band is the only viable choice and that no other band would be suitable, which it was obligated to do in order to become entitled to a waiver. The request claimed, but did not prove, that the 902-928 MHz and 2400-2483.5 MHz bands are unsuitable for non-specific propagation reasons and battery size problems.

6. Nor did it show that any of the Part 90 existing allocations for public safety land mobile applications were unsuitable. If Part 90 channels could be used, Part 90 (service rule) waivers would have been sufficient – a far less disruptive process. As it is, the FCC, without admitting that it was doing so, waived the table of frequency allocations (which ReconRobotics never asked for in the first place). It did so without the normal give and take inherent in a full scale spectrum allocation proceeding that generally would protect incumbent services.

7. The need for waiver was due only to voluntary choices made by the manufacturer for its own convenience, not because of any inherent inability to utilize the high-power Part 15 bands under existing Part 15 rules.

8. The Recon Scout does not differ in terms of its effective transmission range from that of the Octatron and Chang device proposed for waivers for 902-928 MHz, or from the Remington Arms Company waiver for a similar device at 2400-2483.5 MHz. Similar devices that serve virtually identical functions should not be granted different waivers for operation in different bands. Duplicative efforts and *ad hoc* equipment authorizations illustrate the impropriety of the waiver process for authorizing new devices, services or systems.

9. There was no proposal for coordination of the use of these channels with incumbent Amateur Radio operators, on either a local or national basis. ReconRobotics said that it could avoid Amateur Satellite Service downlinks because only Channel C (430-436 MHz) utilizes those frequencies. But there is no ability on the part of the operator of the device to determine where those receivers will be in use. The device is a "deaf transmitter" with respect to 430-450 MHz and it will cause unpredictable, and potentially substantial interference to ongoing Amateur Radio operations.

10. There will be interference to weak-signal terrestrial, point-to-point operations between 432 and 433 MHz; auxiliary and repeater links between 433 and 435 MHz, and international satellite operations above that range. 442-448 MHz is used for FM repeater

inputs and Amateur television repeater inputs. These repeater inputs, both for voice and video, are at high locations where line-of-sight to the Petitioner's devices should be expected anywhere in the United States. Repeaters in this band are routinely used for emergency communications via Amateur Radio for numerous served agencies including FEMA, and so at times when the Recon Scout may be expected to be used, the repeaters may be expected to be in operation in the same areas.

11. Interference ***to*** the Recon Scout may be expected on a regular basis from Amateur Radio operations. Licensed radio amateurs would be perceived to be, or held responsible for the failure or malfunction of these analog devices in a given application and the danger to public safety officers who are relying on them.

12. ARRL is not seeking to deprive the Public Safety community of a device that will benefit their difficult, admirable and important tasks. But the regulatory paradigms that the Commission has established for both allocated services and under Part 15 are workable ones, and waivers should not be substituted for reasoned allocation decisionmaking or as a substitute for use of modern Part 15 technologies that will not cause interference to licensed services. 902-928 MHz or 700 MHz allocations are better alternatives for these applications for public safety use.

13. It was not satisfactorily established why digital alternatives are inadequate, or why analog emissions are necessary. Digital emissions are not any less robust than analog emissions for the proposed application. It costs the manufacturer less to make analog devices. Therefore, the profit margin on each sale is higher if Petitioner's waiver is granted. This is not a valid basis for a waiver grant.

The FCC's order dealt with very few of these arguments, and none of them well. They found, in essence, that there would be very little interference potential (without any stated technical analysis to back that finding up), so the waivers were justified. NTIA agreed to the waiver grant with certain conditions to protect Federal operations. FCC held:

1. FCC can grant a waiver if it is shown that (a) the underlying purpose of the rule(s) would not be served or would be frustrated by application to the instant case, and grant of the requested waiver would be in the public interest; or (b) in light of unique or unusual circumstances, application of the rule(s) would be inequitable, unduly burdensome, or contrary to the public interest, or the applicant has no reasonable alternative. It concluded that ReconRobotics met the first prong of the waiver standard.

2. The Recon Scout will be used infrequently and will be limited in number, significantly reducing the possibility of interference. In addition, it is unlikely that Recon Scout would have a significant effect on the ability of even an amateur earth station operating near the horizon to receive a low-level satellite signal, given the variety of natural and man-made interference sources such as terrain, trees, buildings, and other obstacles and ground level interferers having a greater effect on reception. So, grant of a waiver to permit authorization and licensing of the device on 436-442 MHz is appropriate, because the

device is unlikely to cause interference to amateur satellite communications in the 435-438 MHz segment.

3. As to the 430-436 MHz and 442-448 MHz segments, whether the device could operate without causing harmful interference "is not as clear." However, deployment of the Recon Scout on multiple channels is expected to be rare, and FCC "believes" that interference to these amateur operations can "largely be avoided" by requiring deployment first in the 436-442 MHz segment, then in the 442-448 MHz segment, and in the 430-436 MHz segment only if the other two channels already are in use.

4. As to the public interest requirement for waivers, public safety representatives state that the Recon Scout would be of immense practical use to ensure officer safety in high-risk situations where there is a likelihood of death or serious harm, and no alternative device has the same capabilities.

5. The possibility that the device may receive interference in some instances is not a reason to prohibit its use in any instance. Also, the emergencies in which the device would be used (localized short-term situations) would generally not be the same as those in which Amateurs would be assisting authorities (wider-scale disasters), especially given the device's one-hour battery life.

So, FCC granted the waiver, subject to the following conditions:

1. Eligibility is limited to state and local police and firefighters eligible for public safety licensing and security personnel in critical infrastructure industries.[1] Any offer for sale or lease must state those eligibility limitations.

2. It may be used only during actual emergencies involving threats to safety of life, and for necessary training related to such operations. Security personnel in critical infrastructure industries can use it only in areas that are environmentally hazardous for entry by human personnel, and for necessary training related to such operations.

3. Training operations are not permitted within thirty kilometers of certain Federal radiolocation sites (including Pave Paws sites).

4. The first unit sold to a responding organization will operate on 436-442 MHz, with the 442-448 MHz version being sold only to entities that already own the 436-442 MHz version, and the 430-436 MHz version being sold only to entities that already own the other two versions. (This is to minimize use of the weak signal segment and repeater

[1] "Critical Infrastructure Industries" include Private internal radio services operated by State, local governments and non-government entities, including utilities, railroads, metropolitan transit systems, pipelines, private ambulances, volunteer fire departments, and not-for-profit organizations that offer emergency road services, provided these private internal radio services are used to protect safety of life, health, or property; and are not made commercially available to the public.

inputs).

5. The number of units to be sold is limited to 2,000 during the first year following equipment approval, and 8,000 during the second year. Future sales of the Recon Scout will be reconsidered at the end of this period.[2]

6. The Recon Scout will operate on a secondary basis (cannot cause interference and is not protected from interference) to all Federal users ***and licensed non-Federal users***.

7. Recon Scout transmitters shall be labeled, and shall bear the following statement in a conspicuous location on the device: "This device may not interfere with Federal stations (sic) operating in the 420-450 MHz band and must accept any interference received." In addition, the following statement shall be placed in the instruction manual: "Although this transmitter has been approved by the Federal Communications Commission, there is no guarantee that it will not receive interference."

In addition to these conditions, the devices have to be equipment authorized, and they have to be separately licensed. A log has to be kept of all licensed operation and on request of either agency, that log has to be provided to FCC or NTIA. Finally, in response to the Amateur argument that it is meaningless to authorize these devices on a secondary basis to Amateur Radio, because (a) Amateurs will not be able to identify the source of the interference, and (b) even if they do, the public safety entity will not stop operating the device, either in training or during a real deployment, the FCC said that "we do not believe that this speculation is grounds to deny the waiver request, but we caution prospective users that operation of the Recon Scout in an unauthorized manner will subject licensees to Commission enforcement action and license revocation. Widespread improper use could lead us to stop granting or renewing Recon Scout authorizations."

The most urgent and specific reason for seeking reconsideration here was to fix a glaring error in the labeling requirement in condition 7 above. Though the FCC says that the requirement for operation is that the device is on a secondary basis (cannot cause interference and is not protected from interference) to all Federal users *and licensed non-Federal users*, the label merely says that the device "may not interfere with Federal stations operating in the 420-450 MHz band and must accept any interference received." The FCC merely parroted here the language it got from NTIA. But the label must be modified to state that the device "may not interfere with Federal and non-federal stations operating in the 420-450 MHz band and must accept any interference received." Similarly, the operator manual language is insufficient: it need only state that "Although this transmitter has been approved by the Federal Communications Commission, there is no guarantee that it will not receive interference." This should be modified to add what Part 15 devices must state: "This device must accept any interference received from Federal or non-federal stations, including interference that may cause undesired operation."

[2] Near the end of the second year of the waiver period, ReconRobotics may request authorization to sell additional units in subsequent years.

The Commission is highly unlikely to reverse this decision. This proposal received support from law enforcement agencies and the device apparently has some application in homeland security and law enforcement applications. As a practical matter, we are unlikely to experience significant interference from these devices. However, the FCC acted in an injudicious and arbitrary manner. They should not have conducted spectrum allocations for licensed services by waiver. They should not have merely presumed that there would be no interference to Amateur Radio. We have seen how effective the Commission's predictions are about interference to Amateur Radio from some new in-band application, when those predictions are made in order to justify a politically expeditious outcome. The Commission should have addressed our itemized list of flaws in the ReconRobotics waiver request, including the availability of other bands. Most importantly, they should not have granted a waiver merely to placate a manufacturer which chose its operating parameters and frequency band in terms of its own commercial advantages and because it did not want to incur the expense of re-engineering its product to operate in an appropriate and available band, be it 902-928 MHz, 2400-2483.5 MHz, 700 MHz, or elsewhere. The FCC failed to give this request the "hard look" that it is obligated to give it. All these things were in the record and the FCC failed to address them adequately. An effort to achieve compatible use merely by creating a sequence of band segment occupancy by a fundamentally incompatible device is ineffective, and should not have served to replace careful technical analysis of interference potential as a spectrum management tool. Nor is a limitation on rollout of the device – allocation by scarcity – an appropriate method where the interfering service and the victim service are both itinerant, mobile services.

While perhaps interference to Amateur operations may not be widespread right away, it is predictable, and the Commission has permitted ten thousand Recon Scouts to be sold within two years. The preexisting Amateur Radio band plan is not compatible with the three 6-MHz wide channels chosen for the device. The band edges do not match. In serious danger are the 432-433 MHz amateur weak signal segment and the Amateur-Satellite band 435-438 MHz used for uplinks and downlinks. There are approximately 12 low Earth orbit amateur-satellites currently using this band and at any one time there are about two satellites in view of the United States. The 436-442 MHz Scout channel poses interference to amateur-satellite earth stations receiving signals in the 435-438 MHz band, and the 442-448 MHz channel falls squarely on amateur voice repeater frequencies. Signals from the device on the input frequency of a repeater could activate repeaters for miles around, without identification and without any ability on the part of radio Amateurs to remedy the problem. The FCC's admonition to the public safety entities in the Order is ludicrous.

Our Petition for Reconsideration making the arguments set forth above is pending. The expectation is that the principal result will likely be only a deterrent to similar incursions into the 420-450 MHz band in future proceedings, and hopefully a remedy for the errors in the Order pertaining to the labeling of Recon Scout devices and the warning in the operator's manuals for the devices. It is noted though that ReconRobotics has obtained a grant from a TCB of equipment authorization, even though there is an enforcement proceeding ongoing now with respect to ReconRobotics of unauthorized marketing of the device, which we triggered.

Since the filing of the Petition for Reconsideration, we have found evidence of illegal United States resale of ReconRobotics Scout devices on E-Bay by third parties in violation of the conditions of the waiver, which we, and Laura Smith at FCC are pursuing.

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 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.

6. Docket 05-356, Octatron, Inc. and Chang Industry, Inc. Part 15 Waiver.

Even though the FCC granted the Reconrobotics waiver, the FCC finally, on March 22, 2010 denied this one. 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 watt EIRP at 902-928 MHz for a 360-degree video and audio surveillance system that they claimed 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, 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.

FCC's Order said that Octatron and Chang had not provided information demonstrating that the device would not cause harmful interference to licensed users in the 915 MHz band. The petitioners had only claimed that the devices would be limited in their deployment in terms of time and place. Furthermore, they didn't justify the need for the power level. These flaws were also a basis for rejecting the ReconRobotics device, but FCC applied a different test to this similar functioning device than they did to ReconRobotics. In this case, the matter is closed, apparently.

7. ET Docket 09-36; Alfred E. Mann Foundation, Establishment of a Medical Micro-Power Network Service.

No action has been taken by the FCC on this since the Board meeting on this docket. Our comments were filed in August of 2009. As we told the Board, this docket has a lot of support among the Commissioners, and it should be expected that this

medical implant service, regardless of the wisdom of the choice of frequency band, will likely go forward. Alternative bands may be considered, and interference susceptibility is very much on the table, but in all likelihood, we will have these devices in the 420-450 MHz band, and just above and just below that band as well. We should keep this in mind when considering how to avoid the 420-450 MHz band from becoming a new "junk band."

We filed our comments August 11, 2009. We argued that interference susceptibility of MMNs and interference potential from MMNs to incumbent services are each dependent on a number of factors, and the AMF devices are only one example of the types of devices that might be marketed and utilized pursuant to rules adopted in this proceeding. Unless the rules governing MMNs incorporate as limits the technical parameters and operating limits of the AMF devices specifically, incumbent licensees are forced to speculate about the interference potential to and from an unknown universe of MMNs relative to licensed radio services. We said that the choice of frequency bands for MMNs is unfortunate and unnecessary, and that the existing WMTS Service offers a far more suitable solution than does the 413-457 MHz band for MMNs. The Mann Foundation MMN system utilizes operating parameters which, in general, do not appear to create a significant source of interference to licensed radio services, including the Amateur Service, in the band segments 426-432 MHz or 438-444 MHz. Because of redundant interference rejection design, the AMF devices appear to have some reasonable prospect of avoiding the disastrous consequences of RF interference to implanted MMNs. We said that the Commission should not, however, permit the marketing of MMNs or any similar device in the 420-450 MHz band: (1) unless and until thorough RF interference susceptibility testing is conducted on the AMF devices relative to high power Amateur Radio equipment; (2) at parameters other than those inherent in the AMF system, which incorporates notably redundant interference rejection design characteristics; and (3) without very specific patient notifications and labeling of the body-worn MCUs and other portable components which provide firm assurance that the devices will not malfunction in the presence of RF fields from authorized radio services in the same bands.

8. ET Docket 08-59; GE Healthcare (GEHC) Proposal for Allocation of the 2390-2400 MHz Band.

There has been no action on this since the last Board meeting. This proceeding began on December 27, 2007, when General Electric Healthcare, in a 2006 Docket dealing with spectrum requirements for medical and health care systems, filed an *ex parte* statement proposing 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. 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.

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. However, 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. FCC released a Notice of Proposed Rule Making on June 29, 2009 proposing to create an allocation and rules for this proposed service. What is far worse, however, than the GE proposal is one alternative that the FCC is considering, no thanks to AFTRCC: AFTRCC has proposed, as an alternative to 2360-2390 MHz, the bands 2300-2305 MHz and 2390-2400 MHz.

We filed comments on October 5, 2009. What is far worse than the GE proposal (to allocate 2360-2400 MHz for wireless Medical Body Area Networks (MBANs) is one alternative that the FCC is considering, no thanks to the Aeronautical Flight Test Telecom Coordinating Council (AFTRCC). AFTRCC has proposed, as an alternative to 2360-2390 MHz, the bands 2300-2305 MHz and 2390-2400 MHz. Our comments vigorously oppose this alternative spectrum suggestion, dealing with the Amateur allocations on a segment-by-segment approach.

GE clearly wants 2360-2400 MHz available for MBANs because it is contiguous spectrum. *We are not forecasting a positive outcome in this proceeding for 2390-2400 MHz*.

9. IB Docket 04-286, Recommendations of the Advisory Committee for the 2012 WRC; and Low Frequency Allocations efforts at 500 kHz and 135.7-137.8 kHz.; James Edwin Whedbee LF Petition for 135.7-137.8 kHz.

The FCC issued a Public Notice on March 5, 2010, seeking comments on proposals for WRC-12. Among these is an NTIA draft position on WRC-12 Agenda Item 1.10, seeking to put a high speed data system at 495-505 kHz. This of course would threaten our proposed LF allocation in the vicinity of 495-510 kHz. Brennan Price drafted comments on this narrow issue, which I circulated to the EC for review and filed on March 26.

When Dave Sumner and I were visiting with OET staff in February, we briefed them on our efforts to obtain an LF allocation near 500 kHz and at 135.7-137.8 kHz. We told them that we were preparing some technical studies about the latter and were going to have a discussion when we were ready with UTC, to see if a cooperative arrangement

could be arrived at. As to 500 kHz, we informed them about the difficulties we had encountered with the Coast Guard. OET expressed some empathy, having run into obstinacy on the part of the Coast Guard as well.

We remain concerned, however, about the November 15, 2009 petition for rule making filed by James Edwin Whedbee, seeking an allocation of 135.7-137.8 kHz to the Amateur Service. The justification offered by Whedbee was merely that WRC-07 changed the international table, and therefore this requires a new evaluation, notwithstanding the dismissal of ARRL's proposal for that allocation in ET Docket 02-98 some years ago. We told OET that we were concerned that if this Petition is given publicity, it would cause UTC to oppose it prior to meeting with us and that all of our cooperative efforts would fall on deaf ears. We received no promises from OET, but perhaps they heard us. They are in no hurry to move individual Amateur Radio allocation petitions, surely, so perhaps they will delay any reference to this Petition in any public notices until we can move our plan for 135.7-137.8 kHz along a bit faster.

10. Spectrum for Broadband, Broadband Definitions, and Development of a National Broadband Plan (GN Docket Nos. 09-47, 09-51 and 09-137); FCC Notice of Inquiry, Fostering Innovation and Investment in the Wireless Communications Market (GN Dockets 09-157 and 09-51).

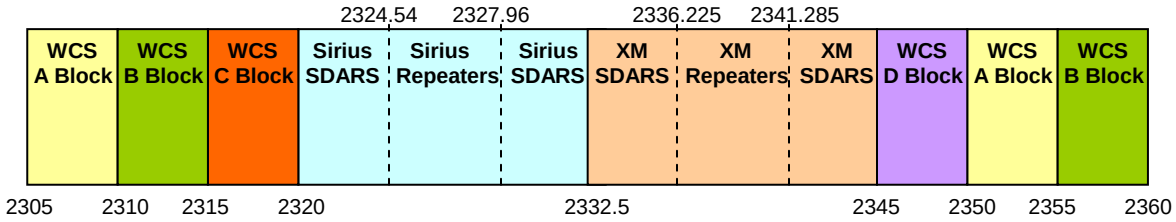
These two dockets are still open, and remain vehicles for possible allocation of spectrum pursuant to the National Broadband Plan. There is no current activity in the proceedings of interest to us at this point. We continue to monitor them.

11. WT Docket No. 07-293, Wireless Communications Services in the 2.3 GHz Band; Interference to 2300-2305 MHz.

On May 20, 2010, FCC adopted at an open meeting and released a Report and Order and Second Report and Order in a series of dockets dealing with the Wireless Communications Service (WCS) in the 2305-2320 MHz and 2345-2360 MHz bands, and as well the Satellite Digital Audio Radio Service (DARS) band at 2320-2345 MHz. FCC moved quickly in this proceeding following the release of the National Broadband Plan to effectively make available the WCS band, formerly available for fixed facilities only, for mobile broadband. However, this is a proceeding that is quite old, dating most recently to a 2007 Notice of Proposed Rule Making dealing only with service rules for WCS, in which we did not participate (as there was no need to do so at the time).

In issuing this Order (which was NOT issued pursuant to the 2007 NPRM), FCC has further diminished the availability to Amateurs of the secondary Amateur allocation at 2305-2310 MHz. More seriously, they have warned of out-of-band emissions (OOBE) that will harm the 2300-2305 MHz weak signal segment. Furthermore, they have warned Amateurs that the Amateur Service will simply have to tolerate this increased noise in their weak-signal operations around 2304 MHz. Virtually no recognition was given in the order of the Amateur secondary allocation at 2305-2310 MHz, but that segment was not particularly useful after the WCS was created and the band auctioned for very flexible

applications quite a few years ago now. The following table shows the allocation situation between 2305 and 2360 MHz:



The FCC Order notes that OOBE from WCS in the A Block, when expanded to permit mobile broadband and portable devices at up to 250 mW EIRP, will have an effect on Amateur operations in the 2300-2305 MHz band. These OOBE for mobile stations must, according to the rule adopted yesterday, be attenuated over a 1 MHz bandwidth below the transmitter power (P) by a factor not less than 43 + 10 log (P) dB on all frequencies below 2305 MHz. For fixed WCS base and other base stations, which can operate in Block A up to 2 kW average EIRP per 5 megahertz bandwidth, OOBE must be attenuated not less than 43 + 10 log (P) dB on all frequencies below 2305 MHz.

The problem is that these OOBE attenuation levels were suggested by NTIA, which intended only to provide protection to deep space research below 2300 MHz. Of Amateur operation at 2300-2305 MHz, immediately adjacent to the A-block, the Commission said:

> We note that some amateur stations operating around 2304 MHz may experience an increased antenna noise temperature caused by the implementation of mobile WCS operations, and will have to tolerate this change in the RF environment. Due to the technical flexibility allowed to amateur stations in Part 97 of our rules, however, we believe that operators of these stations may be able to offset or mitigate the effects of this change by relocating or redirecting their antennas, or by making other permitted technical adjustments.

The FCC's belief that this adjustment by Amateurs is possible is based on their assumptions related to Amateur use of the band 2300-2305 MHz. Quoting again from the Order (with relevant portions italicized):

> In allowing WCS licensees additional technical flexibility to facilitate the operation of mobile services, we must consider potential effects on other spectrum users above and below the WCS bands. Five megahertz below the 2305 MHz lower WCS band edge, in the 2290-2300 MHz band, NASA operates its Deep Space Network (DSN), which is vital for communications supporting space exploration. Additionally, above the 2360 MHz upper WCS band edge, AMT [flight test telemetry] operations are conducted by Federal and non-Federal aviation entities in numerous areas throughout the

country, collecting real-time data for the purposes of aircraft and missile flight testing. *Also, in the 2300-2305 MHz band, immediately below the lower WCS band edge, radio amateurs conduct technical investigations using weak-signal operations. The Commission has also asked whether Medical Body Area Networks (MBANs) should be permitted to operate in the 2300-2305 MHz band.*

All of these services operate with highly sensitive receivers and high gain antennas in order to receive very weak signals. Although the weak signals and highly directional antennas could increase instances of interference, these services are also operated by persons with specialized technical expertise, and have different types of geographical deployments, so the interference considerations are somewhat different for these services, compared to those for the much more ubiquitous SDARS, which is used by consumers. The DSN is located at Goldstone in California's Mojave Desert. AMT receiving antennas are deployed in many areas that often have controlled boundaries, such as Federal and non-Federal facilities and airports. *The number of amateur stations conducting weak signal operations in this band is relatively small, and they are often located in low-noise areas that provide favorable conditions for experimentation. As outlined below, we believe that reasonable rules can be devised to allow WCS mobile operations to commence without causing harmful interference to DSN, AMT, or amateur operations.*

Of course, we are not so sanguine about this. This should be viewed as fallout from the National Broadband Plan, and therefore hard to change, if we were inclined to address it by a Petition for Reconsideration. It is hard to change as well because we have only a secondary allocation at 2300-2305 MHz (though secondary to no primary user at this point). However, increased noise to 2304 MHz weak signal operations is a real problem for more Amateurs than the FCC assumes, and of course not all operations in that band are in rural areas, and noise cannot be avoided from mobile facilities by reorienting an antenna. As to the 2305-2310 MHz segment, that was compromised long ago when WCS was first created, but it is likely to be even less available looking forward.

As of this writing, the FCC has not published this Order in the Federal Register. An Erratum was issued in early June, but it is surprising that it is not yet published in the Federal Register, triggering a Petition for Reconsideration.

B. Non-Allocation FCC Regulatory Issues.

12. Section 97.113(a) of FCC Rules governing communications on behalf of one's employer; WP Docket 10-54 and WP Docket 10-72.

This subject has been the preeminent non-spectrum regulatory issue of 2010 so far. The Board's proactive guidance here was immensely helpful. Minute 48 of the

January, 2010 meeting directed that the staff take "all steps necessary" to add the following (underlined) language to §97.113 of the FCC Rules:

> §97.113 Prohibited Transmissions
>
> (a) No amateur station shall transmit:
>
> ********
>
> (3) Communications in which the station licensee or control operator has a pecuniary interest, including communications on behalf of an employer, except that the station licensee or control operator may, on behalf of an employer, participate in emergency preparedness and disaster drills that include Amateur operations for the purpose of emergency response, disaster relief or the testing and maintenance of equipment used for that purpose. Amateur operators may, however…

Dave Sumner and I had a series of meetings in February with FCC Commissioners' offices to explain and lobby for the Board's plan for a minor amendment to Section 97.113(a) of the Commission's rules, pertaining to (1) communications in which the licensee of an Amateur station has a pecuniary interest, and (2) the prohibition on communications by a licensee on behalf of the licensee's employer. The meetings with Commissioners' offices and the Public Safety and Homeland Security Bureau took place on two different occasions, separated by some disruptive snowstorms in Washington. A copy of the handout we used at these meetings is attached to this memo as ***Exhibit A.*** While these meetings were very productive and while our arguments were met with some apparent favor by the Commissioners' offices, we are well-aware that there are some other views were being actively asserted at FCC as well. These meetings occurred just prior to the time that the American Hospital Association's waiver request was filed, and of course prior to the FCC's March 3, 2010 Public Notice seeking comment on the AHA waiver. As well, the meetings were prior to the release of the FCC NPRM proposing to codify the waiver procedure for Section 97.113(a)(3) waivers. We anticipated, based on information that we received from the Wireless Bureau staff, that the FCC NPRM would be limited to allowing employees who are hams to provide communications on behalf of their employers in the course of a government sponsored emergency communications drill or exercise or training session. This information proved correct.

The American Hospital Association waiver was a February 17, 2010 letter asking the FCC to grant a "blanket waiver" for hospitals seeking accreditation to "use amateur radio operators who are hospital employees to transmit communications on behalf of the hospital as part of emergency preparedness drills." We contacted Bryan Tremont, the attorney for AHA and a long-time FCC 8th Floor staffer, about this. We sent him by e-mail the FCC briefing memo about the Board's 97.113 proposal. I told him that we believe that (1) the Board's proposal satisfies the AHA's concern; (2) that this is a matter of some serious concern in the Amateur Radio community; (3) that in our view, the AHA waiver asks for relief that the hospitals don't need, because they can already do much of what they want under the existing 97.113(a) without a waiver at all; and (4) that we would like to reach a mutually supportable understanding with them about this temporary waiver so that the Amateur Service is not compromised. We told him that the AHA interim waiver request appears to ask for more relief than what is needed (including

authority of hospitals to conduct communications that are currently permitted by the Section 97.113 rules if conducted by volunteers). In other respects, again unnecessarily, our view is that the letter seeks to open the door too widely. As the request reads, it would not limit the Amateur Radio communications to those pertaining directly to the emergency communications drill or exercise. We said that ARRL wants to accommodate all bona fide emergency communications drills and exercises, including those in which hospitals and their employees who are Amateur Radio operators wish to participate. But it is critical to us that any such authorization and any modification of Section 97.113(a) not permit abuses or exploitation of the Amateur Service for business purposes. For example, business restoration communications are not in our view a proper function of Amateur Radio communications.

Bryan acknowledged our overture and said he would talk to AHA about it, we did not hear from his office until the AHA waiver request was released on public notice on March 3. I worked with another lawyer from the same law firm. He assured me that our Board language did satisfy the AHA's concern, and that the communications to be furnished by amateurs pursuant to the waiver would be limited to emergency preparedness and disaster drills specifically for emergency response, disaster relief or the testing and maintenance of equipment for that purpose. They asked whether ARRL was interested in filing joint comments, which we politely declined, and we filed our own comments on April 2. AHA filed no comments, but did file reply comments which supported the ARRL Board's language. This cooperation was productive in the end, though I would have liked to have had a chance to review the AHA reply comments in advance, and would have offered some edits. It is not clear that the AHA understands the subtleties of the FCC's Section 97.113 rule.

No matter. We filed ARRL's comments in response to the FCC's Notice of Proposed Rule Making on May 24, essentially counterproposing the Board's language for the Section 97.113(a) rule for that of the FCC, which was a simple codification of the waiver provisions. The main difference between FCC's proposal and our comments was of course that we did not support the limitation of eligible employee participation in drills and exercises to government sponsored events only.

There were two or three notably objectionable comments filed in the proceeding, and we addressed two of those in reply comments filed June 7. The reply comments addressed the comments of Boeing, which wanted to essentially conduct routine, continuous, internal communications by means of Amateur Radio licensee-employees. We also addressed the comments of Arlington, Virginia's Office of Emergency Management, which sought exclusions from Section 97.113 for certain classes of employees which had nothing to do with emergency communications. Their proposal was absurdly overbroad, and our reply comments were rather direct. The comments of Gordon West were appallingly poorly worded, but, once creatively deciphered, did not rise to the level of deserving a response, so we left those alone.

We anticipate that the FCC will not act on the AHA waiver separately, but instead will be addressed only by the rule change in Docket 10-72. Action is expected this Fall.

13. WT Docket No. 09-209, Amendment of Rules Governing Vanity and Club Station Call Signs; and Call sign assignment system study (Minute 34, January 2009 Board Meeting).

The Board was briefed on this issue in January and decided to delegate the determination of policy to the Executive Committee. We filed comments timely on March 26, 2010 in response to the FCC's NPRM. We did not file reply comments, as none seemed necessary at the time. The NPRM, released November 24, 2009, proposed to clarify certain rules and codify existing procedures governing the Amateur Service vanity call sign system. When the FCC created this system in 1996, it didn't specify all of the procedures to be used. Since then, it developed procedures that were in public notices announcing "starting gates" for issuing the call signs but didn't put those procedures in the rules anywhere. This NPRM proposed to codify those policies and procedures. Most of them were straightforward. They are as follows, briefly summarized.

The first series of proposals deal with deceased licensees' call signs. FCC proposes to codify (in Section 97.21) the existing procedure for canceling a license upon notification of the licensee's death. We supported these proposals.

FCC proposed to modify the process for making a call sign available when the license is cancelled more than two years after the licensee's death, *to withhold availability until 30 days have passed after the staff updates the licensing database to reflect the licensee's death.* This is intended to ensure that the deceased's call sign is unavailable to the vanity call sign system for at least thirty days after the staff takes action to cancel the license in order to allow the assignability of a desirable call sign to become known, and to provide an opportunity for other licensees to apply for the call sign. We supported this as well.

FCC proposed to codify several exceptions to the two-year waiting period for a deceased licensee's call sign.These are non-controversial and we did not oppose them.

However, the NPRM also proposed to limit the availability to clubs of a deceased licensee's call sign (so-called "in memoriam call signs") to clubs of which the deceased was a member. There were several things left unclear in the NPRM , for example, whether the phrase "*was* a member of the club" required that the membership was current as of the time of the holder's death. We asked for clarification.

Existing FCC policy is that, where a vanity call sign for which the most recent recipient was ineligible is surrendered, cancelled, revoked or voided, the two year requirement does not apply. The NPRM Proposes to clarify that there is not a new, two-year waiting period when an ineligible licensee surrenders a call sign. With the clarification that the availability of these "recaptured" call signs should be withheld for 30 days, so that everyone has a chance to know that the call sign has become available again, we supported this proposal.

The NPRM proposed to require that an application to change a club station trustee must be made by "an officer of the club." Specifically, FCC proposed to amend the rules to require that applications requesting a change in trustee include documentation signed by an officer of the club when the application is submitted to the Club Station Call Sign Administrator (CSCSA), but to require that all other applications be submitted by the trustee of the club license. We noted the fact that a "club officer" is not defined by the proposed rule. With the clarification that this should in fact be a representative of the club, and with some clarification of the language in the rule, we supported the principle.

The NPRM would for the first time limit each club to one call sign per club, except that clubs now holding more than one would be allowed to keep them all. The proposal is a per-club limit rather than a per-trustee limit. We opposed this, noting that a better alternative would be to simply prohibit clubs from applying for Group A call signs, with the exception of in memoriam call signs.

The NPRM proposed to allow Novices to be club station trustees. The practical effect would be minimal, because few clubs would want their club station privileges limited to those of a Novice licensee [without the awkward ID procedures required by 97.119(e)]. So we supported it.

We also used this proceeding as a vehicle for proposing a number of changes intended to make various blocks of call sign formats available for the first time. These included the following:

1. Expanding the pool of available Group A call signs to make available for assignment those in which the first character of a two-character suffix is a numeral, in addition to those in which the first character of the suffix is a letter.

2. In offshore areas, prefixes that are assigned to locations without postal addresses and prefixes that are unassigned should be made available in the offshore areas that do have postal addresses.

3. Applicants for Group A vanity call signs should be required to affirm henceforth that they are United States citizens.

4. Finally, the Commission should make available the 2x3 call sign block beginning with N to vanity call sign applications, and it should permit the issuance of three-letter suffix call signs with the prefixes WC, WK, WM, WR and WT.

No action has been taken on this proposal to date.

14. WT Docket 03-187; Effects of Communications Towers on Migratory Birds.

FCC has still taken no firm action in response to 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. On April 14, 2009, the American Bird Conservancy, Defenders of Wildlife and the National Audubon Society filed a joint *"Petition for Expedited Rulemaking and Other Relief"* in this proceeding consisting of 54 pages of argument.

The petition asked the FCC to (1) amend its environmental rules to cure certain deficiencies with regard to protecting migratory birds; (2) prepare a general environmental impact statement with regard to migratory birds to govern Antenna Structure Registrations; (3) adopt new rules to clarify both applicant (general public) and the FCC's roles, responsibilities and obligations with regard to these matters; and (4) reach a conclusion to this proceeding by adopting measures to reduce migratory bird deaths. The filing of this petition for expedited action is simply an attempt by the American Bird Conservancy, Defenders of Wildlife and the National Audubon Society to get the FCC to take some action in this proceeding now that a new Administration is in place and new FCC Commissioners will soon be confirmed and seated. There is very little new information in the petition.

FCC issued a public notice on April 29, 2009 asking for comment on the joint petition. ARRL filed no comments, as the record does not appear to support any regulatory action for towers less than about 400 feet in height. Furthermore, few Amateur antennas require FCC registration (required for antennas that necessitate FAA approval (those over 200 feet or near an airport), which is the target of the bird advocates.

15. IB Docket No. 02-54, Mitigation of Orbital Debris.

AMSAT's petition for reconsideration in this proceeding, filed in October of 2004, 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 and that docket proceeding is final. At this point, it is likely that the FCC will not ever address AMSAT's petition, and AMSAT is not apparently pushing it either, so I will cease reporting no action on this item going forward.

16. 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.

On February 25, 2010, Scot Stone of FCC's Mobility Division called to tell me that finally, the FCC was going to act the next day on our declaratory ruling request that has been pending for a number of years, and that it would be denied, due to the fact that there had been no prosecutions under either the Florida or New Jersey statutes. The state legislation, essentially identical in both states (it seems that New Jersey simply copied the earlier Florida legislation) would criminalize not only radio broadcasting without a

license; it would criminalize interference with radio broadcast reception as well. 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. We filed our February 25, 2005 Petition seeking an FCC Declaratory Ruling that the referenced Florida statute is void as preempted by the Communications Act. In May 5, 2006, we amended our Declaratory Ruling request by filing a supplement asking for preemption of the New Jersey statute as well. Truly enough, 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. Stone had said that the FCC in essence was dismissing the request because "it appears {to FCC] that there have been no prosecutions of hams under either statute and therefore there is no case or controversy that requires FCC intervention." The letter dismissal was in fact released on February 26.

The Commission under Section 1.2 of the rules, "may...issue a declaratory ruling terminating a controversy or removing uncertainty." The Commission has broad discretion whether or not to issue such a ruling. Here, however, there is a clear intrusion into FCC's exclusive jurisdiction to regulate RFI and they have refused to exercise it. One reason for their doing this is because this is old and stale, and adjudicating it now would illustrate how badly the Commission mismanaged its dockets in the past five years. Another explanation is that there is strong support within the Commission to leave these statutes alone because they enable state law enforcement efforts against pirate broadcasting, which FCC supports. The Tampa District Director was (according to Riley Hollingsworth, who heard this first hand) heard to scoff at our Declaratory Ruling request, according to Riley Hollingsworth some years ago, and urging that we be told to dismiss it. The problem is that this is potentially a crack in the eggshell of FCC's firm posture on RFI preemption. The Executive Committee decided to hold on this matter, pending any further enforcement action against any Amateur, because the Commission's broad discretion in issuance of Declaratory Ruling requests made success on any administrative appeal unlikely.

17. RM-11325; Petition re automatic power control of spread spectrum transmissions.

FCC finally acted on the ARRL petition filed March 13, 2006 proposing to eliminate the Automatic Power Control (APC) requirement for Spread Spectrum emissions. FCC released on March 16, 2010 a Notice of Proposed Rule Making and Order. The Notice proposes the elimination of APC, but at the same time, as something of a tradeoff, proposed to reduce the maximum transmitter power output when an Amateur station is transmitting an SS emission from a maximum of 100 watts to a maximum of 10 watts PEP transmitter output power.

We argued in our comments filed June 14 that the APC requirement is difficult to implement and serves as a substantial disincentive to experiment in the Amateur Service.

Further, elimination of the requirement does not change the regulatory obligations of Amateur licensees using SS. The absolute obligation of an Amateur station transmitting SS emissions to utilize the minimum power necessary to conduct communications is intact, according to Section 97.313(a) of the Commission's Rules. Furthermore, the SS rules already make SS essentially secondary to any Amateur narrowband emission modes. Given these existing rules, the APC requirement is not necessary to avoid interference to any other user of the same spectrum as the Amateur SS emission. The only change would be that Amateur SS equipment would not have to be configured to calculate the lowest transmitter power necessary by reference to a remote receiver or to multiple receivers, which has proven an impossible task in many applications. The minimum transmitter power can be determined more flexibly and practically by the Amateur station transmitting the SS emissions, using whatever techniques are necessary to comply with the minimum power rule.

The problem was the FCC's unilateral and arbitrary proposal to reduce the maximum permitted power from 100 watts PEP transmitter power output to only 10 watts PEP output power. FCC cited for this idea only the unquantified and subjective comments of three individual commenters. The power reduction proposed was 90 percent. We grudgingly agreed to this, per the suggestion of Director Bodson, who is our resident expert on the subject of SS, but we reserved the right to petition for higher power if the 10 watts proved an inhibition to experimentation in the future.

II. Antenna and RFI cases.

Palmdale, CA Antenna litigation; Zubarau v. City of Palmdale, Court of Appeals of California. The Palmdale, CA Antenna/RFI litigation is now in the California Court of Appeals, on cross-appeals from the City of Palmdale, which wants Alec's lattice tower removed, and from Alec, who wants an award of attorney's fees (based on California's "Private Attorney General" statute. ARRL filed an amicus curiae brief on July 7, with a motion for leave to file it, and a motion asking that I be permitted to appear in the Court for the purpose of filing it. Whether the Court will accept it is unclear, but we will know in the next few days.

The trial litigation was resolved favorably to Alec Zubarau, WB6X, last February. The City of Palmdale was ordered to reissue the previously revoked "vertical antenna" permit issued to Alec for an antenna support structure at his owned residence in Palmdale. The case was very competently handled *pro bono* by California counsel Len Shaffer, and ARRL received positive publicity for our grant to cover litigation costs up to a maximum of $5,000.00. Palmdale appealed. So did Len Shaffer (on the issue of attorney's fees). The ordinance proposal which was very restrictive is apparently on hold as the result of the court decision.

Alec has not re-installed his 55-foot tower and his SteppIR multiband yagi antenna. He can put the tower back up per the Superior Court decision in his favor, but he has no permit for the SteppIR or any antenna atop the tower, and the Court decision is strictly limited to the tower only, which is what, despite some reasonable confusion on

Alec's part, is all he ever had in the way of authority from Palmdale). Therefore, regardless of where these appeals go, Alec will have to initiate further administrative processes to get a permit for the antenna or any antenna, mounted atop the tower. He does apparently have a short mast on which is mounted an inverted vee antenna, which is not exempt from the permitting process, but the tower has not been erected again yet as a matter of fact.

The ordinance is indecipherable in this City, and so it means essentially what the City wants it to mean. It permits vertical antennas up to 75 feet, but the "active element" of any antenna cannot be higher than 30 feet. "Active element" is not defined anywhere in the ordinance.

This is a State court case, and intentionally so, because in California, the effect of the *Howard v. Burlingame* case has been to cause lawyers to stick with State courts in antenna litigation. Len had initially filed a Verified Petition in the Superior Court of California for Los Angeles County, seeking mandamus and declaratory ruling relief, purely equitable remedies. There were three causes of action: (1) Mandamus to cause the City Council's action rescinding Alec's permit for a 55-foot tower at his property (basically a 9,000 square foot lot) to be set aside; (2) A writ of prohibition relative to the extremely contradictory and confusing ordinance, which seemed to impose a 30-foot height limit; and (3) a declaratory ruling that the City of Palmdale could not regulate RFI.

The Superior Court judge basically granted issue #1, so the tower (sans antenna) could be re-installed at Alec's property. Issue #2 was dismissed as moot, inasmuch as Alec got what he had before, which was a permit allowing the tower to be installed. Issue #3 was denied outright, without comment from the judge. The judge was very specific that the ruling allowed only the tower to be re-installed, and he indicated that the City has the ability to enforce its ordinance with respect to any antenna to be installed atop the tower. The Judge's "tentative ruling" was that the ordinance was invalid, and it contained a very extensive analysis of PRB-1 and the City's obligations under it and under the California PRB-1 statute, which in some ways is very positive, speaking as it does to what a municipality "shall" or "shall not" do with respect to the three elements of the PRB-1 test. Nevertheless, the Judge, as Len put it, "talked himself out" of preempting the ordinance. Nevertheless, the "minute order" accompanying the judgment discusses the California PRB-1 statute and the Federal requirements. In addition, Len was denied an award of attorney's fees, principally, apparently, on the ground that Alec was not obligated to pay any to Len, since Len is appearing *pro bono publico*. Therein, however, is what I consider to be the most interesting aspect of this case for hams, at least, throughout California.

There are now pending cross-appeals. I am reasonably proud of our Amicus brief, and I urge you to read it when you get the chance. We remain hopeful that the brief will be accepted. I would like to continue to support Len Shaffer in this case as oral argument approaches. He is the epitome of the Amateur Radio Service's spirit of volunteerism and he deserves our encouragement and any support we can give him. He is a trial litigator by experience and his appellate argument experience is limited. If he requests it, I would like

the authority to work with him in the preparation for and the conduct of his oral argument. I have argued a case before the California Court of Appeals recently and perhaps can be of some assistance to Len in this respect.

San Diego Antenna Ordinance Negotiations. This is an ongoing negotiation of an ordinance for Amateur antennas. The City planning staff and city attorney concocted a deceptive and very restrictive ordinance. We met with the City Attorney on January 20 in San Diego in an effort to negotiate the terms of a reasonable ordinance. There is a well-organized local effort in San Diego working on this, and Vice Director Woll has been extremely active in the organizational aspects of the effort. We have provided some memoranda of law for the attorney there working with the hams (who is not himself a radio amateur, but is very savvy and experienced in land use regulation matters). This effort is in good hands. We have written a brief to the City Attorney directly dealing with this matter also.

With authority from Dave Sumner, and by prior arrangement with Marty Woll, I flew to San Diego on January 19. I met early on the 20th with Marty, N6VI and Larry Serra, N6NC to plan strategy at Larry's law office in downtown San Diego. Larry and Felix Tinkov, Esq. are the two attorneys principally involved in this effort. Felix, a land use lawyer (and not a ham) was retained by the San Diego DX Club, and Larry is working *pro bono*. I hadn't realized it at the time, but I worked with Felix' law firm on an AM broadcast matter in Julian, California some years ago. Felix is a very impressive lawyer who is well-known throughout the City and in City government. Larry, in his volunteer capacity, is of exceptional value to these negotiations, and was formerly with the City Attorney's office.

There are two documents comprising the antenna restrictions proposed by the City. The first is the proposed ordinance itself, which imposes draconian height limits on amateur radio antennas. The ordinance defines an antenna tower as the support structure plus the antenna. The City contains numerous planned and historic zones and what are known as "overlay zones" which are environmentally sensitive zones. Many of these are west of I-5, which bisects the City longitudinally, but in the aggregate they constitute at least half of the City. In these zones, antenna height would be limited to building height which is typically 35 feet. In all other zones, antenna height would be limited to the LESSER of 70 feet or 135% of building height. In most areas of San Diego not in a historic, planned or overlay zone, this would limit antenna height to roughly 40 feet. The 70 foot opportunity is virtually non-existent and an illusion.

The ordinance does not impose a fixed height limitation, however, as it might seem to. This is because the ordinance permits the filing of an application for a "Neighborhood Development Permit." This is not like a Conditional Use Permit in that it is a low level staff procedural option that is nonetheless discretionary. The City claims that this is the lowest-level variation procedure, applicable to divergences from area parameters or limits in zoning ordinances. The problem is that there is an upfront payment due to the City in applying for such a permit, in the amount of $8,000.00,

against which the City can charge essentially any amount they want. And there is no limit. If, for example, the City wanted to hire an expensive consulting engineering firm to determine either the safety of a proposed antenna or the necessity of the height applied for in order to effectively communicate, the sky is the limit. A neighborhood permit for a vertical antenna could cost $15K, as an example. I prepared an extensive memo on preclusive costs and the effect of those on the FCC Preemption Policy, which Felix delivered to the City, but the City Attorney's position was that the proposed ordinance is in her view "legally defensible" and therefore, no change in the ordinance will be recommended to the City Council members.

The second document is known as a "negative declaration". It is an environmental document prepared under the purview of the California Environmental Quality Act (CEQA). CEQA is a far-reaching regulatory framework which requires that any "project" be reviewed for its potential to cause significant impacts to the "environment." It is in essence the State of California's version of the National Environmental Policy Act (NEPA) but it is very far reaching. A "project" under CEQA is broadly defined as any activity which may cause either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment. The environment refers to the physical conditions that exist within an area which will be affected by a proposed project, including impacts to land, air, water, minerals, flora, fauna, noise, and objects of historic or aesthetic significance, among other things.

Where, as in the San Diego situation, a public agency proposes to create an ordinance which will have downstream environmental impacts, CEQA requires an analysis of those impacts (i.e. the impacts of the ordinance proposal). If the agency, after performing an initial study, determines that there are no significant impacts from the ordinance, they may legally prepare a negative declaration (of impacts). The next step up would be a mitigated negative declaration (where significant impacts are known from the initial study, but mitigation measures are proposed which would minimize impacts to below a level of significance). The next and final rung in CEQA environmental analyses is known as an environmental impact report (EIR). These are very lengthy reviews culling information from a variety of technical studies performed by certified experts/consultants in the categories determined to have significant impacts. While an EIR can ultimately determine appropriate mitigation measures, it can also determine that no amount of mitigation will bring all impacts to below a level of significance, in which case the public agency must approve a "statement of overriding considerations" which basically says, "yes, we know we're doing harm, but there's no better alternative to reach the goal we are striving for."

The reason why there are potential environmental impacts stemming from the City's proposed ordinance is that public safety is an impact category. Here, the City's proposal would potentially have (in our view) catastrophic impacts on the general populace's ability to deal with natural and man-made disasters due to the proposed restrictions on Amateur Radio stations. The neg-dec fails to analyze this, and several other key environmental issues. In fact, Marty and I noticed right away that the neg-dec in this case really doesn't address the impact of the ordinance on Amateur Radio

communications at all. Instead, it addresses the visual impact of Amateur towers and antennas on the City, which is not what the City was obligated to analyze under CEQA. In other words, the City used the neg-dec as an opportunity to justify its ordinance, rather than to dispassionately examine the results of the ordinance on the environment (including the impact on public service, emergency and disaster relief communications in San Diego). The neg-dec is fatally flawed for that reason (again, in our view).

An individual antenna and support structure installation may be seen as a project under CEQA, especially if a discretionary process is required. The City could certainly try to foist a CEQA analysis on an individual ham applicant, though there are several potential exemptions to CEQA which would likely apply to a tower installation. That said, the City could still try to make an application a hellish experience for those who don't have a clue about what is and isn't required under CEQA. They haven't done that to date, but they could.

Later in the morning of the 20th, Felix and Glenn Rattman from the San Diego DX Club arrived at Larry's office and the five of us completed (without a lunch break) our discussions of the meetings of the day. At 1:00 PM, Larry Serra, Glenn Rattmann, Marty Woll, Felix Tinkov and I met at the City's offices with Kelly Broughton (Director of Development Services), Cecilia Gallardo (Deputy Director of Development Services and the head of the Entitlements Division), Jeff Szymanski (Associate Planner and preparer of the negative declaration), Jana Garmo (Deputy City Attorney), Amanda Lee (Senior Planner), Myra Herrmann (Senior Planner and Environmental Analyst), and Carl Feree (Communications Division – possibly, the "expert" the city has on amateur radio transmissions, and a ham, or so he said).

Broughton made it clear that he had direction from the City Council, via a 2005 Land Use and Housing Committee, to "restrict" antenna tower installations and that staff have no say in the policy decision to make the ordinance any less onerous. Broughton also admitted that the permitting process is "very subjective." Garmo went further and flipped the legal situation on its head, saying the regulations being proposed are the City's attempt to create a process which will actually allow applicants to put up towers, because there is no process in place under the present ordinance. That is not correct; while the present ordinance does not specifically provide for Amateur Radio antennas, the City grants these permits, on the theory that they must under PRB-1 and Section 97.15(b) of the FCC Rules. No amount of discussion of the finer legal points by Felix, Larry Marty or myself seemed to sway Garmo from her position that the proposed ordinance is legally defensible. Larry and I told Garmo in no uncertain terms that the ordinance was indefensible and would be subject to preemption, and she in essence said that she disagreed and that if it came to that, we could litigate the matter. The City planning staff has asserted that a typical Amateur Radio antenna system involved antennas about 40 feet tall. Therefore, the ordinance accommodates, they claim, most hams.

At about 3:30 PM, Larry, Felix, Glenn, Jim Price, K6ZH and Gordon Schlesinger (Jim and Gordon are from the San Diego DX Club) and I met with City Councilmember

Marti Emerald (District 7) and her chief of staff, Xema Jacobson. Emerald and Jacobson voiced their support for our position. Emerald offered to contact JW August, managing editor of Channel 10 News, to bring this situation to light. They have also offered to bring this ordinance to the Public Safety and Neighborhood Service Committee, which Emerald chairs, so that it can be killed, reworked or redirected back to staff with new orders.

At about 4:00 PM, Larry, Felix, Glenn, Jim Price, Gordon Schlesinger and I met with Keith Corry, Councilmember Donna Frye's (District 6) Western Clairemont Mesa representative. Corry explained that in his 6 years operating as Frye's technical issue advisor he only had a handful of complaints about antenna towers and they never amounted to anything. He believed that Frye would support us on our position. Corry asked for our submittals to the city, which Felix provided to him later.

At this point, the group adjourned, and I caught a flight home the next morning.

Though we were of the view that in all likelihood, litigation would be required, and that this ordinance might pass, it is not clear to me now where this is going.

So far, we have provided an extensive memo of law directly to the City Attorney, criticizing the ordinance; an extensive memo of law to Felix on cost prohibitions of antenna installations; and we have consulted with Felix and Larry. ARRL has made a donation to the San Diego DX Club to cover the work of the Katz lobbying firm on this ordinance. And Marty has, on ARRL's behalf, provided many, many hours of work and the benefit of his extensive experience to this project. It is a high profile antenna ordinance and a particularly onerous proposal that is worthy of continued dedication of resources to defeat.

Mustang, OK. This is a bit less satisfactory a story. We have written the City Manager and City Attorney twice on this antenna ordinance matter. The City has twice proposed Draconian ordinance provisions; the first time, the draft included RFI regulation provisions; we apparently convinced the City Attorney that there was no RFI jurisdiction, because the second ordinance proposal did not include such, but it did include severely restrictive antenna height and configuration (including setback) requirements, including limiting the types of antennas and support structures that can be used.

Most recently, Dean Feken, KL7MA, has been doing a good job negotiating with the City Manager, but the ordinance is still not "fixed". The City is a suburb of Oklahoma City, where we have had antenna problems in the past. The current proposal is to permit antennas with an overall aggregate height of 50 feet. I suggested to Dean that he attempt to address three final problems, and then declare victory, if there was no more room to negotiate. The first is that the antenna or array is considered part of the overall height of the tower. This severely restricts antenna experimentation, and it means using a much shorter than normal, plain vanilla tower (typically 50-55 feet). The antennas should not be regulated except to the extent that the total maximum wind load in the tower specs should not be exceeded. The second is that there is no definition of house bracketed

towers. A house bracketed tower should be treated as a guyed tower. As it is, house bracketed towers are not even defined, and so they are not permitted by the draft ordinance.Finally, one provision is overkill: if the tower meets manufacturer's specs, and the NESC code, and if it must be able to safely support the antennas and other attachments as per the ordinance, there is no need for an antenna below 50 feet to be subject to a registered PE certification. That is overkill and the cost of that may well exceed the cost of the antenna installation. So we recommended that such be deleted.

We will continue to monitor this matter.

Tom Taormina v. Storey County, Nevada.

There was released on June 17, 2010 an order from the United States District Court for the District of Nevada involving long time contester (and an all-around good guy in my book) Tom Taormina, K5RC, late of Houston and other locations. Fred Hopengarten was either lead counsel or co-counsel in this case. The Order is a denial of summary judgment in a PRB-1 (and Nevada version of PRB-1) case. The case was not known to me prior to the time that Fred Hopengarten sent it around asking for opinions on appeal possibilities. In the view of several members of the ARRL Antenna Defense Committee, the case is a dog and should not be appealed without further administrative proceedings being done first.

Basically, Tom lives in a zone of Virginia City (which, based on past personal experience with an FM broadcast application, involves historic preservation issues) that apparently does not allow towers at all. That is Fred's interpretation, not that of Storey County or the trial judge. There is an apparent 45-foot height limit in zones where towers are permitted, and there is a CUP process for towers that the judge found applicable to Tom's property. So, there is apparently, according to the judge, a use permit process available to permit towers in the zone, and for tower height greater than 45 feet. Tom has not, to date, applied for a CUP for his two proposed towers.

Tom applied to erect two towers, one 120 feet and one 195 feet. He actually was issued building permits, and was twice inspected before and apparently after pouring concrete for footings. The second time, there was a discovery that a "variance" was necessary, and then a stop work order was issued, so that a CUP for towers over 45 feet could be obtained. Tom did not apply for a CUP (or a variance), but instead sued for a declaratory judgment. He, probably through Fred, filed a motion for summary judgment, and the Court denied it. Fred is now considering an appeal to the 9th Circuit U.S. Court of Appeals. I think that is not entirely wise.

This is the first USDC case on PRB-1 in quite some time, and that it is adverse (at least to the extent that an apparent flat prohibition on towers in a zone can somehow survive a PRB-1 challenge) is noteworthy. This does not look to me like the right case to take to the 9th Circuit (which issued the noxious "Howard v. Burlingame" decision years ago), but we are still looking at it, and more importantly, so is the Antenna Defense Committee.

III. Other Legal Matters.

There are several other matters that are worth mentioning.

1. NPSTC. I have participated as ARRL's representative in two meetings of the Governing Board of NPSTC, the National Public Safety Telecommunications Council. I am pleased to note that Mike Corey, W5MPC, will be the primary ARRL representative to NPSTC in the future. Mike was well-received at the NPSTC meeting just past in Alexandria, Virginia. NPSTC is an increasingly important public safety organization and we are very well-positioned and a well-respected member of the Governing Board. We should make sure that sufficient attention is paid to NPSTC in the future, as that is a goldmine in terms of strategic partners in regulatory proceedings. We have not in the past been at all consistent in our participation with NPSTC and I think it is a very worthwhile entity looking ahead.

2. Declining Volunteer Service. There have been several instances of difficulties with field organization volunteers recently. The subject of declining to accept or terminating a volunteer's participation in ARRL organized activities is a sensitive issue and one deserving of the attention now being paid to it by the Programs and Services Committee. I offered the following in an April memo to the Executive Committee, and I have participated in a PSC conference call on the subject. I hope this issue is being actively reviewed by PSC in the near term.

The Executive Committee at its Spring meeting in Denver discussed the subject of declining to accept or ceasing to accept volunteer assistance for field organization participation in individual cases. The Programs and Services Committee was to have addressed that matter, but I recall that I was to have drafted model language for SMs to consider in declining to accept service on a case-by-case basis from individuals.

In any case, Director Woolweaver has been patiently awaiting from me a form of a letter to be sent by a particular SM to a volunteer from whom volunteer services are no longer desired. The policy adopted by the EC supported a case-by-case evaluation by an SM (or his or her designee in the field organization) of an individual's suitability for a volunteer field organization position. The ability of an SM to decline service in individual cases assumes that there are, in the reasonable judgment of that SM, non-discriminatory reasons why the services of a particular volunteer are not desirable, or no longer desirable if previously accepted.

The language is really rather simple; the difficulty is in avoiding providing a reason to the volunteer as to why her or his services are not, or are no longer, accepted. In most cases, demands are made for a disclosure of those reasons, and such should be avoided by the SM or designee of the SM in all cases. Neither ARRL nor any of our elected field officials is a finder of fact in these situations, and it is sufficient and necessary to recite that acceptance or non-acceptance of volunteer service (again assuming that the reason for non-acceptance is not based on any suspect categories of the

volunteer, such as race, sex, national origin, sexual orientation, age or religion) is discretionary with the organization. Offering a reason for non-acceptance of services leads to contentious disputes of fact that tend to mushroom out of control and prolong the matter.

This is offered now due to a time critical matter in Director Woolweaver's Division. If this requires further attention by a Board Committee, I will be happy to work with that Committee to revise this as necessary.

Model language for non-acceptance of volunteer service from a new volunteer:

Dear _____:

Thank you for your offer of service to the ARRL Field Organization in the capacity of _____. As the (SM or designee) of the _____ Section, I review the volunteer resource needs of the Section periodically. Acceptance or non-acceptance of volunteer service is discretionary within the Section. It has been determined that your volunteer services are not required at this time. We will notify you if the situation changes. Again, thank you for your offer of service to the Section.

73, _____ (Section Manager or Designee)

Model language for termination of volunteer service from a volunteer:

Dear _____:

Thank you for your past volunteer service to the ARRL Field Organization in the capacity of _____. As the (SM or designee) of the _____ Section, I review from time to time the requirements of the Section for volunteer service. As you may know, acceptance or non-acceptance of continued volunteer service is discretionary within the Section. It has been determined that your volunteer service is no longer required at this time. We will notify you if the situation changes. We appreciate your past service to the Section.

73, _____ (Section Manager or Designee)

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

_____

Christopher D. Imlay
General Counsel

APPENDIX A

Report of the General Counsel
To the Board of Directors
July, 2010

The Amateur Radio Pecuniary Interest Rule And Communications on Behalf of One's Employer- 47 C.F.R. § 97.113

Issue: Whether the Commission should modify 47 C.F.R. § 97.113 (a) to permit employees who are Amateur Radio licensees to provide Amateur Radio communications on behalf of their employer under certain circumstances.

Present Rule: The rule now reads *in relevant part* as follows:

> §97.113 Prohibited transmissions
>
> (a) No amateur station shall transmit:
>
> *****
>
> (2) Communications for hire or for material compensation, direct or indirect, paid or promised, except as otherwise provided in these rules;
>
> (3) Communications in which the station licensee or control operator has a pecuniary interest, including communications on behalf of an employer. Amateur operators may, however…
>
> *****
>
> (5) Communications, on a regular basis, which could reasonably be furnished alternatively through other radio services.

Statement of the Problem: The "no communications on behalf of an employer" rule has sound policy bases. It protects the Amateur Service to some extent against commercial exploitation and protects employees from being subject to unreasonable pressure from an employer to use their Amateur Service licenses for purposes for which the service was not intended. However, in some cases, Amateurs who are employees of entities that might reasonably wish to engage in emergency communications planning and training (such as hospitals and medical care facilities) cannot themselves do so on behalf of their employer but instead must use non-employee volunteers for the same purpose. The existing rule clearly prohibits transmissions by employees on behalf of their employers (for example, to conduct business continuity communications). However, the rules clearly permit precisely the same communications, if performed by a non-employee volunteer radio Amateur. If the rule is modified to permit some types of communications on behalf of the employer of an Amateur Radio licensee, it should be done in such a way that does not permit the Amateur Service to be misused as an inexpensive alternative to Part 90 land mobile communications or other radio services.

The Commission recently created a waiver process whereby Amateur licensees could request of the Wireless Bureau and be granted (on a case-by-case basis) a waiver to conduct communications on behalf of an employer in connection with a "government-sponsored drill or exercise." However, that process is administratively cumbersome for those seeking such waivers and for the Commission's staff.

The Commission is Examining This Issue Now: ARRL is informed that the Public Safety and Homeland Security Bureau, in coordination with the Wireless Bureau, is preparing a proposed change to Section 97.113(a) of the Commission's Rules to eliminate, or to create exceptions to the prohibition on communications on behalf of one's employer by Amateur Radio licensees. It may be that the Commission intends to permit an exception for employee licensees to provide communications for employers during government sponsored drills or exercises, or something broader.

ARRL Suggests a Balanced Approach: ARRL's view is that it is important to preserve the non-pecuniary character of the Amateur Service, and to avoid pressure by an employer on an employee to exploit the Amateur Service for the commercial benefit of that employer. The Commission, at ARRL's request, substantially broadened the types of communications which can be conducted by Amateur Radio licensees in 1993: In Docket 92-136, the Commission relaxed the restrictions on business communications in the Amateur Radio Service. The reason for the change was "to give amateur operators greater flexibility to provide communications for public service projects as well as to enhance the value of the amateur service in satisfying personal communication needs." However, there was *no change* to rule that *prohibits* communications in which the operator has a pecuniary interest, <u>including</u> *communications on behalf of an employer*.

ARRL believes that the following revised language would accommodate those limited instances in which employees might wish to participate in Amateur Radio communications in preparation for an emergency, including emergency communications planning and training, while also preserving the non-pecuniary nature of the Service:

> §97.113 Prohibited Transmissions
>
> (a) No amateur station shall transmit:
>
> ********
>
> (3) Communications in which the station licensee or control operator has a pecuniary interest, including communications on behalf of an employer<u>, except that the station licensee or control operator may, on behalf of an employer, participate in emergency preparedness and disaster drills that include Amateur operations for the purpose of emergency response, disaster relief or the testing and maintenance of equipment used for that purpose</u>. Amateur operators may, however…
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> *****

(5) Communications, on a regular basis, which could reasonably be furnished alternatively through other radio services.