

# **REPORT OF THE GENERAL COUNSEL TO THE EXECUTIVE COMMITTEE**

**Dulles Airport Marriott, Reston, Virginia  
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**Christopher D. Imlay, W3KD  
Booth, Freret & Imlay, LLC  
14356 Cape May Road  
Silver Spring, Maryland 20904-6011  
(301) 384-5525 telephone  
(301) 384-6384 facsimile  
[W3KD@arrl.org](mailto:W3KD@arrl.org)**

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# MEMORANDUM

**Greetings.** The following is an *attorney-client privileged communication and constitutes work-product*. Please keep the following information confidential. The following briefing memo is keyed to the draft agenda circulated to the Committee by Mr. Sumner. If any member of the Committee has any questions about these items, I will be pleased to address them, either prior to the meeting or during the meeting.

## **Agenda Item 4; FCC/Regulatory Items**

### **4.1. Action items**

**4.1.1. Continuation of Evaluation of Strategies to Improve the FCC Amateur Radio Enforcement Program (Report on Sumner/Hollingsworth/Imlay anticipated meeting with Enforcement Bureau Front Office; report on Riley Hollingsworth's recent meetings with Laura Smith and Ricardo Durham; status of WARFA Net malicious interference and New York City area malicious interference cases; determination of near-term advocacy strategies to improve FCC Amateur Radio enforcement program performance and increase deterrence; status of OO program; visibility of FCC point of contact for Amateur Radio enforcement).** There is much to report concerning the FCC and enforcement in the Amateur Service. None of it, as of now, is good news, as I see it. However, we have been proactive recently to a greater extent than in the past with respect to enforcement, and it is urgent now for the EC to develop and approve our advocacy strategy to address FCC's apparent plan: (1) to deemphasize (to put it mildly) spectrum enforcement for all services; (2) to gut its District (field) offices; and (3) to focus on those enforcement actions that can be done by lawyers in Washington, D.C. which are consumer protection type issues such as slamming and other non-RF violations. This Draconian effort is reportedly the brainchild of FCC Chairman Tom Wheeler, and the story on the street is that FCC Enforcement Bureau Chief Travis LeBlanc was brought to Washington to mastermind and implement this strategy (which, to some extent, we are recently being credited with exposing). Because it has been clear for quite a while that Amateur Radio enforcement is at the back of the bus in terms of enforcement priorities and in the deployment of limited enforcement resources in the field; and because FCC insists on using its own District Office staff exclusively for gathering evidence for Amateur Radio license revocations, non-renewals, forfeitures and the like, the proposed drastic cuts in District Offices and proposed reductions of field office staff by 50% will have an easily predictable effect on the FCC's willingness and ability to conduct even the most basic enforcement activities in our Service.

To take this back to its genesis, we first got word of the FCC's apparent plan last October. I reported to the Board in January the following:

**Disturbing Trends:** In October, I received some very disquieting confidential information from a long-time acquaintance of mine who has exceptionally good and completely reliable contacts at FCC...(f)or many years he has been involved with a national broadcasting association doing reasonably successful advocacy for broadcasters at FCC. He

now works with the New York State Broadcasters' Association. He too has met with LeBlanc, on several occasions about pirate broadcasters...

...The broadcasters do not have any version of Laura Smith. He told me in October at a broadcast engineering conference in Syracuse that his conversations with FCC staff including LeBlanc led to the firm conclusion that FCC has decided that it doesn't have and never will have the staff to effectively enforce its rules for the protection of one radio service from another. Instead, it is planning (and Wheeler brought in LeBlanc in order) to reconfigure the Enforcement Bureau into a "consumer protection" type of entity, the functions of which would be to protect telecom consumers against slamming, unauthorized carrier changes, billing fraud, and those kinds of objective, non-RF enforcement issues that do not require RF sniffing, direction finding, field office staff, etc. If that is done, the enforcement work can be done by lawyers in Washington rather than engineers in District Offices. There would be only that level of protection in the field necessary to protect auction winning bidders against interference to the spectrum that they paid for, and presumably safety of life services. There would be virtually no enforcement resources for those mainstream radio services who do not pay for spectrum.

My source says that his information is reliable and that LeBlanc is part of the plan, and that LeBlanc was brought to Washington from California for the express purpose of reconfiguring the EB as mentioned above. I didn't get any indication from LeBlanc that there was any plan to reform EB when Riley and I met with him but frankly, LeBlanc didn't say much of anything about his plans at the time and we didn't know enough to ask then. But regardless of whether the scuttlebutt that my source got about EB reform is good or not (and I would bet that it is), it is obvious that his concerns are similar to ours and that if he is right, we will have a deteriorating enforcement environment going forward, as will the broadcasters in dealing with pirates. Apparently pirate broadcasting is at an all-time high now in New York, Miami, Orlando, and in California, among some other places.

So, on March 4, 2015 FCC's Managing Director Jon Wilkins was called before the House Communications and Technology Subcommittee to testify about an FCC Budget Bill. He was asked repeatedly, very specifically by Kansas Representative Michael Pompeo whether the FCC intended to close any field offices and/or eliminate any personnel. Wilkins waffled (see the video at <http://energycommerce.house.gov/hearing/reauthorization-federal-communications-commission-fcc%E2%80%99s-fy-2016-budget-request> and go to the one hour, 15 minute mark). His testimony was notably evasive and misleading if not outright false, indicating that a final report from an outside consultant had not been obtained and that no decisions had been made. Six days later, I obtained from a broadcast engineer acquaintance on the West Coast a copy of a leaked FCC internal memorandum dated March 10, 2015 and signed by LeBlanc and Wilkins, recommending that the Enforcement Bureau eliminate 16 of its 24 field offices, retaining only those in New York; Columbia, MD; Chicago; Atlanta; Miami; Dallas; Los Angeles, and San Francisco. Equipment but not people would be kept in Kansas City, Salt Lake City, Phoenix, Seattle, San Juan, Anchorage, Honolulu and Billings. Management would be cut from 21 to five director positions and from 10 to three support positions. Field agents would be cut from 63 to 33. A copy of the leaked internal memo is attached as **Exhibit A**.

Before this memo leaked, we were already in the process of setting up a meeting (per the EC's prior directive) with the EB front office, hopefully with Travis LeBlanc, to address several issues: (1) The status of the WARFA Net high-frequency malicious interference in the

Southwestern United States, and VHF repeater malicious interference in New York City and Long Island, New York; (2) Changes in the Amateur Radio enforcement program following the appointment of Laura Smith, as Acting Northeast Regional Counsel and the reorganization of the Enforcement Bureau; (3) the EB's plan for processing Amateur Radio complaints filed through the Consumer Help Center Online Complaint procedure; and (4) the Amateur Auxiliary to the FCC and the status of the 1994 amended agreement between ARRL and the Commission providing for the use of Amateur Radio licensees as Official Observers to contribute to the Commission's enforcement effort in the Amateur Radio Service and the use of their work-product by the Commission. We have of course added a fourth topic, which is the status of Amateur Radio enforcement pending the proposed EB reorganization. We will be having this meeting with William Davenport on Wednesday the 18<sup>th</sup> (Travis LeBlanc responded that he is traveling a good bit currently, and since we wanted to have this meeting before 21 March, LeBlanc asked if we could meet with Davenport and if it was possible for LeBlanc to drop in on the meeting if he was in town that day, he would). A copy of the briefing memo that we prepared for Davenport is attached as **Exhibit B**. It is a concise summary of the enforcement problems that we perceive now and reading that briefing memo will obviate the need for me to repeat that information in this memo. We have provided a copy of this memo to David Redl, the Majority Counsel to the House Communications and Technology Subcommittee of Energy and Commerce.

In preparing for the Davenport meeting, Riley Hollingsworth has had some conversations with Laura Smith and with another EB acquaintance of his. We were able to get some good insight into the current EB situation from Riley's efforts. Dave and Riley and I went to FCC Gettysburg for a meeting with some members of the FCC Consumer and Governmental Affairs Bureau on February 24<sup>th</sup>, to be briefed about the use of the online complaint filing system. Dave has reported to the Board about this on March 3<sup>rd</sup>. Finally, Kay, Dave, Riley and I had a conference call with Laura Smith on Friday, March 13<sup>th</sup> during which Laura provided some candid information about her job situation, the likelihood that Amateur enforcement will be substantially adversely affected by the reorganization plan, and the status of our two major enforcement cases. We will discuss this at the meeting (and don't take this for gospel as it is not really reliable): she tells us that the WARFA net interference case is "hot" right now, but that the New York repeater jamming case is not because the District Office has been unable to catch the perps in the act, since much or all of the jamming is from mobiles. We will have more information for you about these cases at the EC meeting, after our Davenport meeting at FCC on the 18<sup>th</sup>.

**4.1.2. ET Docket 15-26, Vehicular Radars in the 76-81 GHz band (Proposal to create new Part 95, license-by-rule service for radars operating at 76-81 GHz; NPRM issued February 5, 2015 based on RM-11666; comments due April 6; replies April 20).** This has turned into a potential problem for the Amateur Service relative to our primary allocation at 77.5-78 GHz and our secondary allocations at 76-77.5 and 78-81 GHz. I mentioned to the Board in January that the petition that I filed on behalf of my client Robert Bosch, LLC (and other automobile manufacturers and automotive radar manufacturers worldwide) to standardize the operation of unlicensed, short-range and medium-range vehicular radars in the 77-81 GHz range in the United States on a Part 15 basis in 2012 was on circulation among the Commissioners. It was in fact released on February 5, but it did not track the Bosch Petition well at all, and the

NPRM as it was released is a problem for both Bosch and for ARRL for the reasons discussed below. I have repeatedly noted to the Board and the Executive Committee since 2012 that my dual representation of Bosch and ARRL creates a potential conflict of interest for me. However, it is my view, and it has been all along, that there from the outset and there is now a complete identity of interest between Bosch and ARRL on this topic. The same things that concern Bosch about the NPRM are our concerns as well. Nevertheless, should any member of the Executive Committee review this matter and conclude otherwise, I will immediately recuse myself from representation of both Bosch and ARRL in this matter. I have in any case developed a plan with Brennan Price whereby I will provide a draft of comments for ARRL to him, and he will review it, make whatever changes are called for in his view (and that of Kay and Dave), submit the final draft to the EC and file the comments timely over his signature as CTO (if the EC agrees to this plan). The Bosch comments filed in response to the NPRM, which I am now drafting, will be completely supportive of retaining the entirety of the allocation status that Amateurs have now domestically, and they will strongly oppose the authorization of fixed radars in the band 76-81 GHz.

Bosch's petition was a domestic version of a worldwide effort to consolidate newer automotive safety functions in automobiles in the band 76-81 GHz and to move them away from 24 GHz. The band 76-81 GHz is already in use in Europe for this purpose. Applications include automatic braking, sideward and rearward anti-collision systems, and other automotive safety systems. There was no threat in Bosch's petition to continued Amateur Radio unrestricted access to our primary allocation at 77.5-78 MHz or our secondary allocations at 76-77.5 GHz or 78-81 GHz (Note that FCC suspended Amateur operation at 76-77 GHz 15 years ago in order to avoid any interaction between high-power, forward looking automotive radars and Amateur Radio, though the allocation for Amateur Radio remains in that band). However, FCC's current proposal would considerably broaden the scope of the allocation status of 76-81 GHz to include airport runway debris detecting radars and tank level probing radars and other fixed radars. It is substantially different than Bosch proposed it. Worst of all, it questions the compatibility between all wideband radars in the band, existing and proposed, and continued Amateur Radio operation in this band.

FCC proposes in the NPRM to adopt rules that will accommodate the commercial development and use of various radar technologies (fixed and mobile) in the 76-81 GHz band under Part 95 of the Rules instead of Part 15 as Bosch had proposed. The NPRM includes allocation changes to the band as well as sharing provisions. Specifically, the NPRM asks for comment on the proposals to: (1) Expand radar operations in the 76-81 GHz band to include various fixed and mobile uses; (2) To modify the Table of Frequency Allocations to provide an allocation for the radiolocation service in the 77.5-78 GHz band; (3) Authorize the expanded radar operations on a licensed basis under Part 95; (4) Shift vehicular and other users away from the existing Part 15 unlicensed operating model; and (5) Evaluate the compatibility of incumbent operations, including Amateur Radio, with radar applications in the 77-81 GHz band.

Bosch asked that all Amateur Radio allocations be kept intact and in fact asked FCC to consider adding an allocation at 75.5-76 GHz to compensate for any potential reduction in utility to the Amateur Service of the band 77-81 GHz if automotive radars were allowed into that band under Part 15 (not Part 95). Allowing fixed radars in the band 76-81 GHz, especially on a

licensed basis is a huge problem for automotive radar manufacturers as the only studies to date from Europe indicate that there is *not* compatibility between fixed and automotive radars. Nor, according to Brennan, is there compatibility between fixed radars and Amateur Radio. There is, however, according to an ITU study (ITU-R Report M.2322), compatibility between automotive radar and Amateur Radio. That is a long report but the conclusions reached in it are as follows:

Theoretical studies and observations indicated that the required separation distance between automotive radars and incumbent services could range from less than 1 km to up to 42+km, depending on the interference scenario and deployment environment. These results were based on worst-case assumptions and did not take into account for the effects of terrain shielding, terrain occupation and the implementation of mitigation techniques to reduce the possibility of interference to incumbent services. When these factors are taken into account, the possibility of co-channel interference to incumbent services from automotive radars is sufficiently low and manageable. Therefore, it can be concluded that in the 77.5-78 GHz band, sharing is feasible between automotive radars and incumbent services.

It is expected that any potential cases of interference between automotive radars and incumbent services could be addressed by mitigation factors such as terrain shielding, emission power limits and quiet zones. Some areas of concern remain and may need to be further analysed and dealt with by administrations. It is anticipated that the radio astronomers, radio amateurs and the automotive radar manufacturers will continue their cooperative effort to examine and implement mitigation techniques that can be employed to address potential interference concerns.

Both ARRL comments and Bosch comments will rely heavily on that study in order to push for retention of Amateur Radio, radioastronomy and automotive radar as the only services permitted in the 76-81 GHz band.

FCC, however, asks the following questions in the NPRM at paragraph 63:

Based on our proposals for new vehicular and other radars in the 77-81 GHz band, we propose to adopt a comprehensive approach for amateur radio use on these frequencies. Given the continuing lack of technical sharing criteria or any other evidence of compatibility, should we extend the 76-77 GHz amateur suspension to the entire 76-81 GHz band? If so, should we modify the current amateur suspension of use of the 76-77 GHz band by removing all amateur allocations from the 76-81 GHz band? Alternately, would it be possible to lift our suspension of the amateur service and conduct both amateur and vehicular radar operations in the entire 76-81 GHz band? We tentatively conclude that there is no apparent technical reason to treat the 76-77 GHz and the 77-81 GHz bands differently. Commenters who believe that we should continue to distinguish between the two bands should explain the reasons for doing so. We also seek comment on whether there are other approaches that would achieve compatibility between the amateur and radiolocation services within the 76-81 GHz band that we have not discussed above.

Bosch, in its petition, states that it “is unconvinced, after several meetings with technical staff of ARRL, the national association for Amateur Radio, that there is any significant incompatibility between Amateur Radio and SRR operation at 79 GHz.” It says the nature of amateur use of this spectrum – largely experimental and occurring on mountaintops and locations where motor vehicle operation is not typical – will provide sufficient geographic separation to prevent interference from amateur users to new vehicular radar operations

above 77 GHz. However, Bosch also notes that European regulators previously determined “that the use of SRR within the band 77-81 may be incompatible with the Radio Amateur Service,” but also concluded that amateur users could be accommodated in the 75.5-76 GHz band (which is not currently available in the U.S.). We seek comment on these points. Additionally, to help us better inform our decision, we seek to develop a record on the types of amateur use, and the extent of such use, that is currently undertaken in the amateur 4 mm band.

We will respond to these questions and the Bosch comments will be consistent with the defense of Amateur Radio in this band. Part 95 status does nothing for automotive radar manufacturers which have been using the 76-77 GHz band for many years pursuant to Part 15 without any difficulty at all.

**4.1.3. RM-11715; Mimosa Networks, Inc. Petition for Rule Making, proposing a Part 90 Fixed and Mobile allocation in the 10.000-10.500 GHz band; impact on Amateur secondary allocation (Discussion of Capitol Hill advocacy efforts of Mimosa and report on ARRL countermeasures; determination of short term strategy for domestic and international advocacy; ARRL comments filed at FCC April 11, 2014).** We have been successful so far in opposing the effort of Mimosa Networks of Los Gatos, CA to reallocate the 10-10.5 GHz band for fixed broadband. Mimosa, a wireless broadband products manufacturer filed a Petition for Rule Making May 1, 2013 seeking a Part 90 mobile allocation in the 10.000-10.500 GHz band, and service rules permitting Part 90 licensing of mobile wireless service providers in that band. It was placed on public notice March 11, 2014. We filed comments in strong opposition to the Petition on April 12, 2014 in an effort to protect the Amateur secondary allocation at 10.0-10.5 GHz and the Amateur Satellite Service secondary allocation at 10.45-10.5 GHz. Both the Amateur Service and Amateur-Satellite Service allocations are secondary only to Federal Government radiolocation. By footnote, NON-government radiolocation has to share with Amateur Radio on a non-interference basis (i.e. they cannot interfere with us). That same U.S. footnote, however, *apparently denies FCC the authority to make the allocation that Mimosa is asking for:*

US128 In the band 10-10.5 GHz, pulsed emissions are prohibited, except for weather radars on board meteorological satellites in the sub-band 10-10.025 GHz. The amateur service, the amateur-satellite service, and the non-Federal radiolocation service, which shall not cause harmful interference to the Federal radiolocation service, are the only non-Federal services permitted in this band. The non-Federal radiolocation service is limited to survey operations as specified in footnote US108.

Our argument is that the FCC is without the jurisdiction to make this allocation, at least without some buy-in from NTIA. Brennan Price has worked with DOD and NTIA staff and so far, NTIA has indicated no intention to roll over for Mimosa. Mimosa filed some very aggressive reply comments, but they were in our view ineffective in rebutting our Footnote 128 argument.

Brennan has also beaten back a last-second effort by Mimosa (which has been very poorly represented at FCC and ITU so far) to obtain a fixed and mobile allocation internationally at the upcoming WRC.

However, on March 2, 2015 a letter was sent to FCC Chairman Wheeler, obviously at Mimosa's request, signed by Representatives Doris Matsui, Brett Guthrie, Anna Eshoo and Robert Latta; and by Senators Cory Booker and Marco Rubio. The letter didn't mention Mimosa at all, but did ask FCC in general terms to consider sharing opportunities at 10 GHz in order to permit expanded wi-fi capabilities in the 10 GHz band. The premise was the success of the AWS-3 auctions that netted about \$45 Billion for the Feds. Dave Sumner sent a response letter to each of the members of Congress and copied FCC Chairman Tom Wheeler immediately after Brennan Price learned of this letter. Copies of the Congressional Letter to Wheeler and our response are attached as **Exhibit C**.

I did, last week visit the offices of each of the Representatives and Senators who signed the letter, with the exception of Anna Eshoo's office (TKG seems to have a uniquely difficult time setting appointments with Eshoo's office for some inexplicable reason; the rest of the Hill seems to be their oyster). I explained the complicated sharing situation in this band in particular and the reason why there is no compatibility between or among incumbent users (including the Amateur Service) on the one hand, and fixed or mobile broadband on the other, in this band. With the exception of Matsui's office, I got no pushback from any of the staff I visited with, and in fact they each engaged in a lot of crawfishing. They did ask for details as to why sharing would not work but each assured me that there was no intention to disrupt any Amateur operation in the band. Matsui's office said that they did not endorse any particular petition at FCC or any particular proposal by any company, but that they would do some continued due diligence and would contact NTIA and DOD. Brennan discovered that on the day of (or perhaps the day after) my visit, Matsui's office did contact DOD and were given a tough reception. But it is my view that Congress is riding very high after the AWS-3 Auction and it will be difficult to keep their interest in 10 GHz at bay. So we need to keep in touch with NTIA to make sure that they continue to protect military airborne radars at 10 GHz and retain the footnote US128 to the Table of Allocations that precludes any new allocations (other than the Earth Exploration Satellite Service that is proposed to be added to this band at WRC-15 and which is compatible with Amateur Radio to an acceptable extent.

**4.1.4. FCC Staff changes (Imminent retirement of FCC Wireless Telecommunications Bureau staff member and effect on ARRL advocacy efforts; determination of ARRL response).** We have known for quite a long time that Bill Cross at Mobility Division, WTB planned to retire this Spring. He has recently made the April 3 date of his retirement official. He has confirmed that he is unlikely to be replaced in doing Amateur Radio rules interpretations and in the administration of Part 97 service rules and Part 97 dockets. So, we will likely have in his place only Scot Stone, KC3DCD. Scot is a recently minted radio Amateur, having gotten his Tech license in June of 2014. He has not been particularly easy to deal with, but we have a reasonable, détente-type relationship with him at this point. I asked Bill if there was likely to be, upon his retirement, a revival of the former turf war between the Public Safety and Homeland Security Bureau and the WTB over Part 97 regulation and Bill was quite sure that there would not be. Stone is to handle all rule interpretation inquiries and Part 97 rulemaking.



It is highly unlikely that we could influence FCC's hiring process through *any* means and so lobbying for a replacement for Bill at any level would (a) not likely be successful, and (b) we don't know who we would get. While Stone is no picnic going forward, and while he has very little credibility in the land mobile radio community (Scot currently spends almost all of his time doing Part 90 issues) due to an extensive list of perceived errors in land mobile rule interpretation letters Scot has authored) he is at least nominally an Amateur licensee and has some experience with our Part 97 issues (which after all form a very small part of our advocacy concerns these days). Cross tells me that Scot got his Tech license in order to have some credibility with the Amateur Radio community. Given the substantial likelihood that the devil we know is going to be better than would be the devil we don't, and since there is not likely to be a devil we don't know hired anyway, it is suggested that we leave the *status quo* and wave while Cross rides off ignominiously into the sunset.

**4.1.5. MITRE Corporation HF experimental license WH2XCI, FCC File No. 0162-EX-PL-2014, granted October 1, 2014 (Discussion of interaction to date with MITRE and FCC re inevitable interference in multiple HF bands; determination of strategy re HF Experimentals and STAs going forward).** On October 1, 2014, MITRE Corporation was granted an Experimental license for a two-year period to operate a total of 21 transmitters at each of ten discrete, fixed locations in New York State and Massachusetts for the purpose of testing high frequency (HF) communications in a variety of frequency bands from 2.5 MHz to 16 MHz. The call sign is WH2XCI. We know of and expect experimental licenses and STAs in our bands all the time, and leave them alone typically because they are issued on a non-interference basis for short, or at least limited terms. The only time we object to them is (1) if a given EXP or STA indicates that the license is to gather data to support a reallocation request; or (2) if the experimental operation is so clearly incompatible with ongoing Amateur operation that there will inevitably be interference. The MITRE HF license is squarely in the latter category. MITRE is a government contractor and research firm.

WH2XCI authorizes MITRE's operation in, among others, the bands 2505-4100 kHz, 5005- 6210 kHz, 6320-8250 kHz, 10.005-12.200 MHz and 13.500-14.990 MHz. These bands of course include the Amateur allocation at 3500-4000 kHz; the 2.8 kilohertz bandwidth channels allocated to the Amateur Service centered at 5332 kHz, 5348 kHz, 5358.5 kHz, 5373 kHz and 5405 kHz; and the Amateur allocations at 7.0-7.3 MHz, 10.100-10.150 MHz and 14.0-14.350 MHz.

In our letter to MITRE dated February 12, 2015, a copy of which was sent to FCC, we requested that MITRE provide written assurance to my office that MITRE will either: (a) avoid the use of Amateur Radio HF allocations, or (b) provide notification to ARRL of all times and frequencies of operation in any of the HF Amateur Radio allocations. Failing confirmation of one of those options, we told them that we would "immediately petition the FCC to rescind the Experimental License or condition it to include a prior notification requirement in real time for each and every use of the transmitters authorized by the authorization at each site."

We explained that the HF bands and channels are each heavily occupied at all times of the day and night by large numbers of Amateur Radio operators using narrow bandwidth emissions. The emissions authorized by WH2XCI are maximum bandwidths of 5 kHz, 500 kHz

and 1 MHz. The authorized effective radiated power levels range among 6 Watts, 24 Watts or 122 Watts. The purpose of MITRE's experimental operation is to test the "capability of higher bandwidth and higher data rate communications in the HF bands applying polarization diversity MIMO (multiple input, multiple output) concepts" for beyond line-of-sight propagation including ionospheric propagation. This is for "critical communications," apparently. It sounds a lot like an experiment being conducted for a government agency.

The "Researchers' note" in the application states that "we understand that this wideband waveform may run up against other users and possibly cause interference. We plan to transmit at as low a power as possible and on a not-to-interfere basis...". The application also indicated that most operation will be between 100-300 kilohertz bandwidths. We argued that regardless of bandwidth, there is no chance of avoiding interference to ongoing HF Amateur Radio operation, and that when the interference from MITRE's wide bandwidth transmitters inevitably occurs in the narrow bandwidth, sensitive receivers used by Amateur Radio operators, *there is no way that the victim Amateurs will able to determine the source of the interference or know to whom they might complain about it.*

It took a long time for MITRE to respond to this letter, but ultimately they farmed it out to a local (tenured) communications lawyer (who I like) who did respond by the March 6, 2015 letter attached to this memo as **Exhibit D**. However, MITRE's reply is not responsive and offers us no substantial relief. They do make it clear that they have commenced operations. We have a local person in Massachusetts monitoring one of the transmitter sites but not all of them.

The issues for the EC's determination are the proper response to this letter and how we should address the matter of MITRE's Experimental license at FCC. On the theory that this is pursuant to a government contract or study, it may be quite difficult to cause FCC to rescind the Experimental license completely. We could ask FCC to impose a condition requiring MITRE to coordinate with us, which they have declined to do. However, we should respond to MITRE affirmatively and quickly in some fashion.

#### **4.2. Status update/reporting items and/or FCC submissions since January 2015 Board Meeting**

**4.2.1. RM-11708; ARRL Petition for Rule Making to delete restrictions on symbol rates for data communications and to establish a 2.8 kilohertz maximum occupied bandwidth for data emissions below 29.7 MHz (Updated status report on FCC planned adjudication of Petition).** Cross has drafted an NPRM on this and it was sent to the front office of WTB some months ago. Cross wasn't sure whether it was still in the front office or whether it was sent to the Commissioners. It is not as of this writing on the "circulation" list of items pending before the Commissioners.

**4.2.2. ET Docket 13-49; Revision of Part 15 of the Commission's Rules to permit unlicensed National Information Infrastructure (U-NII) Devices in the 5 GHz Band. (Comments filed May 28, 2013 re rules governing Part 15 devices and Wi-Fi in the 5850-5925 MHz band; update on status of proceeding).** There is no action on this from FCC, though the Capitol Hill offices I visited about the Mimosa matter are all waiting with bated

breath for some FCC action resolving the dispute between unlicensed broadband and DSRC intelligent transportation systems for Vehicle-to-Vehicle and Vehicle-to-Roadside communications. It is a very hot issue for Capitol Hill.

**4.2.3. RF Lighting Device Complaints to FCC (Status of efforts to cause FCC enforcement of overpower RF lighting ballast devices; whistleblower contact re pending Lumatek complaint).** As of now, we are preparing for filing additional complaints of non-FCC compliant RF lighting ballasts, the engineering for which was expertly prepared by Ed Hare and Mike Gruber at Headquarters. In addition, there is a complaint against Home Depot for selling and marketing Part 18 RF lighting devices that are supposed to be restricted to industrial environments to any buyer without instructions as to the intended deployment. Thus, the devices end up in residential environments and serve as community-wide noise sources. We hope to have these filed by the time of the meeting.

Meanwhile, I received a call recently from an individual identifying himself as Chad Peterson, who lives in Northern California. He claims to have worked for Lumatek and claims to have personally witnessed the Lumatek principal falsifying FCC labels on Lumatek's Chinese import RF Lighting ballasts that we complained about to FCC. He describes this one principal of Lumatek as a deranged individual (a similar description was received from the attorney for a former Lumatek retailer with whom we have been negotiating). Peterson has some ongoing litigation with the Lumatek principal and has offered to provide a rather damning statement under penalty of perjury attesting to the fraudulent activities of Lumatek relating to the RF lighting ballast that we complained about. I told Peterson that he should consult an attorney before making this offer to us and that I would not want to make his dispute with the Lumatek principal any worse than it might be at the present time. He indicated that it could not get any worse and reiterated his offer. I told him I would get back to him. It is not clear to me that we have anything to gain by exposing Lumatek's principal as a fraud artist, and I have no idea of the validity of this former employee's bona fides. But I leave it to the EC to decide how to proceed. Our argument is purely technical as to the FCC rule violations for this one Lumatek device but one of the complaints about to be filed relates to a second Lumatek device.

**4.2.4. Pave Paws Radar and Amateur Interaction, 70 cm. (Recent contacts from Air Force re possible upgrades of Eglin or other Florida AFB radar systems and effect on 70 cm repeater networks in Florida).** The following report is courtesy of Dan Henderson, who has been ably spearheading our good relationship with the Air Force relative to Pave Paws and other military radars and possible interaction with Amateur 70 cm repeaters. Dan reports as follows:

For some time we have been aware that we might have to address possible 70cm interference issues to US Air Force radar systems at Eglin AFB in Florida. During the first week of March, Dan Henderson received an email from Dave Pooley, our contact at USAF Space Command's Spectrum Management of concerns raised by the staff at Eglin. Pooley asked for the ARRL's assistance in implementing a cooperative system similar to what we were able to develop with the Amateurs at the two PAVE PAWS sites in northern California and on Cape Cod, Massachusetts.

Dan has spoken with representatives from the Florida Repeater Council, including its Vice President/Secretary Marshall Paisner, K4MAP, and also with its frequency coordinator for the region that includes Eglin. That coordinator happens to be ARRL Honorary Vice President and former longtime Director Frank Butler, W4RH. Dan has also had conversations with the base frequency manager at Eglin (and the manager's assistant who happens to be an Amateur Radio licensee). After these discussions, Dan made the recommendation that until the Air Force can have its RF Investigation unit visit the base and do an assessment, the FRC should delay any coordinations for new or modified repeaters in the 70cm band. This would impact only three proposed new repeaters in the general proximity of the base.

Reviewing the written standards of the FRC, they do already include the required power restrictions for any 70cm repeater located near Eglin, as required by the FCC rules. There appear to be approximately 20 repeaters within 100 miles of the base. Based on the conversation with the Eglin spectrum managers, any interference appears to be sporadic; there are no specific patterns of usage times or days evident. They also have expressed concern about a new, 70 cm linked repeater system currently being implemented across Florida. We will continue work with the Air Force as their testing takes place, and then assess what additional steps we can recommend to the FRC that would help ensure that this potential problem is minimized or eliminated. There is no public timetable for the 85th EIS (the Air Force's engineering team) to do a site visit to Eglin. However, we do know now that the first steps to make that happen have been implemented.

Thanks to Dan for taking the point on this issue with the Air Force. Dan and I will keep Director Rehman, the Executive Committee and the rest of the Board apprised of events of any significance as they develop. For now, be assured that we are actively engaged with the Pentagon's spectrum managers, Dave Pooley and with the FRC. ARRL is on top of this and we have positive feedback about our efforts from all on the military side of the fence.

**4.2.5. ARRL Petition for Rule Making to Amend Parts 2 and 97 to Create a New MF Allocation for the Amateur Service at 472-479 kHz. (Status of 472-479 kHz Petition filed November 29, 2012); and ET Docket 12-338, Amendment of Parts 1, 2, 15, 74, 78, 87, 90 & 97 of the Commission's Rules Regarding Implementation of the Final Acts of the World Radiocommunication Conference (Geneva 2007), Other Allocation Issues, and Related Rule Updates; (135.7-137.8 kHz allocation and 1900-2000 kHz primary allocation).** There has been no final action on these issues since December 17, 2014 when I wrote to Julius Knapp and explained that there was no reason that we were aware of for the two-year delay in resolving this proceeding, and that because FCC has not taken any action to re-upgrade the allocation status of the 1900-2000 kHz band to Amateur primary, we did not have any ability to object to a strong interfering signal on 1915 kHz emanating from Nova Scotia causing harmful interference to radio Amateurs. Because the signal is operating in the radiolocation service, amateurs operating at the top half of 160 meters cannot object to harmful interference from that source. We asked that, at the very least, the 160-meter issue be severed and acted on as it is largely non-controversial.

Knapp replied the same day, December 17, 2014, by e-mail as follows:

Hi Chris, Dave and Kay: I know this has taken quite a bit longer than I told you I expected, primarily because there were several other issues in the proceeding that we needed to resolve. While it has taken some time, I believe we now have a much better product. We are in the final stages of coordinating the draft order and I anticipate action early next year. We'll keep you posted on how things are progressing. In the meantime, I hope you all have a wonderful holiday season. Regards, Julie

*On March 4, 2015 a draft Order was sent to the Commissioners by OET in Docket 12-338 which should resolve this entire proceeding.* This should be released imminently. I continue to expect that the FCC will elevate the Amateur Service allocation at 1900-2000 kHz to primary. I still anticipate that we will be denied access to the LF band (135.7-137.8 kHz), but that we will be successful in obtaining access to the MF band (472-479 kHz) allocation. FCC may issue a further NPRM proposing the 472-479 kHz allocation together with the Order dealing with our other two issues.

**4.2.6. ET Docket No. 13-44, Amendment of Parts 0, 1, 2, and 15 of the Commission's Rules regarding Authorization of Radiofrequency Equipment; amendment of Part 68 regarding Approval of Terminal Equipment by Telecommunications Certification Bodies (Proceeding terminated by FCC Report and Order December 30, 2014; no reconsideration filed).** No one else filed a Petition for Reconsideration and this Report and Order is now final and the docket closed.

#### **4.3. Open items with no FCC action since January 2015 Board Meeting**

**4.3.1. RM-11731; AT&T Mobility Spectrum LLC et al. Proposed Modification of FCC Part 27 Wireless Communications Services at 2305-2320 MHz and 2345-2360 MHz (Comments filed September 22, 2014).**

**4.3.2. IB Docket 04-286, Recommendations Approved by the Advisory Committee for the 2015 World Radiocommunication Conference (ARRL Comments filed August 28, 2014).**

**4.3.3. WT Dockets 03-187 and 08-61; Effects of Communications Towers on Migratory Birds (No action since March, 2012 FCC report).**

**4.3.4. ET Docket 14-99, Model City for Demonstrating and Evaluating Advanced Sharing Technologies (ARRL Comments Filed August 29, 2014).**

**4.3.5. ET Docket 13-84; Reexamination of RF exposure regulations. (FCC proposal to subject the Amateur Service to a "general exemption" table for conducting a routine environmental review of a proposed new or modified station configuration; exemption criteria as the preemptive standard as against more stringent state or local criteria. ARRL Comments filed 9/3/2013 and Ex Parte to WTB made on 5/13/2014).**

**4.3.6. ET Docket 13-101; Receiver Performance Standards; Technological Advisory Council White Paper (ARRL Comments filed July 22, 2013).**

**4.3.7. WP Docket 08-63, ReconRobotics, Inc. Video and Audio Surveillance System at 430-450 MHz.**

**4.3.8. FEMA proposal for Modification of FCC Rules for licensing of FEMA stations and use of Special Call Signs Denoting FEMA (akin to Milrec or Club Station Licensing).** Dave Sumner reports via Ross Merlin, WA2WDT, that FEMA's draft Petition for Rule Making that was reviewed by the last EC, is past FEMA's legal review, and off to the Chief Information Officer at FEMA. FEMA employee Dave Adsit, KG4BIR (FEMA Frequency Manager) will be setting up the briefing for the CIO. The CIO will then, if he approves, submit it to DHS's representative on the IRAC at NTIA asking for permission to submit it directly from FEMA to FCC, or for IRAC to submit it on behalf of all Federal agencies. This is not anticipated to be a quick process. Our contact, Ross, has a new job and he says that liaison with FEMA on Amateur Radio matters is one of his official duties.

**4.3.9. General Docket 14-25; Public Comment on FCC Report on Process Reform (Comments in response to Public Notice filed March 31, 2014).**

## **Agenda Item 5. Local antenna/RFI cases**

**5.1. Myles Landstein, N2EHG v. Town of LaGrangeville, NY. (Status Report; Complaint prepared vs. LaGrangeville).** A complaint in this case has been prepared and is to be filed imminently by Landstein's attorney. It principally argues that there is a cost prohibition imposed by the Town of LaGrangeville against Landstein's antenna, and the Town failed to consider an Amateur Radio antenna to be a normal accessory use to residential real property. I must say that the draft complaint that I was shown was without any doubt at all the worst effort I have seen in a long time, and I am left to question the competence of Landstein's attorney. I had to rewrite the whole thing essentially and offered a highly redlined version to Jon Adams, Landstein's attorney, who claims he used all of our edits. I was becoming concerned that Landstein would never file a complaint and our grant funds would produce nothing of value, however, so I am pleased to see that this case is finally getting off the ground.

**5.2. Jeff Hullquist, W6BYS, vs. City of Napa, CA (California Environmental Quality Act analysis of 55-foot antenna and aesthetic impact; cost prohibitions on Amateur antenna in historic zone).** This is an interesting case in which a radio Amateur erected a 55-foot antenna in a historic zone in Napa, CA and was told to take it down and to obtain a permit. He applied for such and was told that due to the potential aesthetic impact of the case, he must pursuant to the California Environmental Quality Act (CEQA) prepare at his expense an Environmental Assessment. This is a very expensive process and it is a question whether or not PRB-1 precludes the requirement of an EA as a condition of a grant of a permit for an Amateur antenna in a residential area. The fact that the residence is in an historic zone is a huge problem in this case. This matter is now before the ARLDAC for grant funding consideration. Jeff fired

his former attorneys and hired a more high-powered zoning firm to represent him. We have been in touch with them and provided a lot of material to his former counsel.

## **Agenda Item 6. Other legal matters.**

### **6.1. Repeater Coordination and Receipt of Information for the Repeater Directory.**

Brian Mileschosky asked that this matter be brought to the EC. In the Rocky Mountain Division there is an example of a problem that has occurred before and now exists again, relative to the fact of multiple repeater coordinators in Wyoming. The issue is that ARRL has an agreement with a prior iteration of the National Frequency Coordinators' Council (NFCC) (which is currently, according to multiple sources, in one of its many periods of dormancy, if not actually defunct) that ARRL will accept repeater data for the ARRL Repeater Directory® only from NFCC recognized coordinators. Now, and for a long period, the NFCC-recognized coordinator in Wyoming is one Greg Galka. There is, however, and for several years has been a second, well-established coordinator in Wyoming, an active group that has coordinated more than 100 repeaters by the name of WYOHAM. WYOHAM and Galka have battled for some time and reportedly, WYOHAM was created by a local club because Galka's coordination activity ebbs and flows and he is incommunicado for long periods of time.

Based on a mediation telephone conference call that Brian engineered, and mediated by the Colorado coordinator (who clearly favored Galka over WYOHAM) the two agreed to work together and to share data. Galka had, prior to that mediation effort, taken the position that ARRL recognized Galka as the sole coordinator because we accepted only his data for the Repeater Directory. We informed Galka that the acceptance of data from Galka did not constitute an endorsement of Galka and that FCC clearly anticipated the potential for multiple coordinators in a given area for a given band or bands.

Galka didn't wait long before abandoning his commitment to work cooperatively with WYOHAM and he has recently once again adopted the position that WYOHAM is not a recognized coordinator. Because of ARRL's policy with the defunct NFCC (which was premised on an active NFCC that actively kept track of who the coordinators were in a given area), only Galka has access to our electronic input system for repeater coordinators. We still pay coordinators to input data for the Repeater Directory.

Brian is not asking for adjudication by ARRL of the Wyoming repeater coordinator dispute. There is no doubt at all that both coordinators are recognized in Wyoming by substantial groups of local Amateurs in the State, including repeater trustees. However, Galka is not inputting into our Repeater Directory any of WYOHAM's data and WYOHAM can't do it themselves because of our policy.

Therefore, in view of the inability of any group of repeater coordinators or users to constitute an NFCC, and our agreement with the allegedly defunct NFCC is therefore in serious doubt, and because there is no reason that is beneficial to our membership to refuse to accept data from what is obviously a recognized coordinator in Wyoming for our Repeater Directory, the question arises whether the policy that we have now should be modified. There is of course a problem with determining who the bona fide coordinators are in a given area, a subject that we

have scrupulously avoided in the past, and a task that we expected an active, functioning NFCC to assume.

## **Agenda Item 7. Legislative matters.**

**7.1 Status of Congressional advocacy of H.R. 1301, the “Amateur Radio Parity Act of 2015” (CC&R Legislation; report on advocacy efforts to date in House and efforts to obtain Senate companion bill; consideration of strategies for 114th Congress; meeting with Walden re same).** The activities of the EC members this week prior to the EC meeting make any preliminary remarks on this topic premature. Surely, after the Hill meetings, and especially Kay’s meeting with Mr. Walden on Thursday, we will have plenty to discuss at the meeting. Suffice it to say that H.R. 1301 is in good stead at this point. It is hoped that all Board members will advocate our legislative effort at Amateur Radio gatherings and especially ARRL field events. In my view, it would be highly improper for a member of the Board to actively denigrate a policy or initiative that has been adopted by a majority of the Board of Directors at a public Amateur Radio event.

**7.2. State legislation re tower lighting and painting (“crop-duster” statutes in Western States; advocacy strategy determination).** The Keelen Group is in the process of helping us obtain from FAA an opinion as to the FAA’s jurisdiction over the airspace which we believe is exclusive and therefore preemptive relative to State crop duster statutes. Attached as Exhibit E to this Report is a briefing paper that TKG prepared and has submitted along with some questions for the House Transportation Committee staff to send to FAA to get us a definitive opinion from FAA. If FAA is not defensive of its own jurisdiction, we will have to determine how to proceed with respect to these State statutes. If FCC is defensive of its jurisdiction, we will use what we get from FAA to address these statutes at the state level.

I will be pleased to address any questions you may have about this report before or during the upcoming meeting.

Respectfully submitted,

*Christopher D. Imlay*

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Christopher D. Imlay  
General Counsel