

Regarding FCC 15-92 (ET Docket 15-170)

Submitted by:

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Author:

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Specific Comments:

15-170 Paragraph Number	Comment
28	<p>We support the use of SDoC as an internationally recognized approval process for specific types of equipment. However the proposed rules under 2.909(b) do not indicate any provision for definition of responsible party when multiple importers / resellers are marketing a specific product. Does this mean that there will be multiple SDoCs? How is continued compliance assured between Responsible parties. What happens when there is inconsistent information between two different Importers for the same product; which one takes precedence?</p> <p>We urge the commission not to restrict flexibility for manufacturer's to select multiple importers / distributors / retailers from marketing equipment; the purpose of refining these rules is to make efficient use of a refined process. Nevertheless, it remains unclear what role and responsibility each party may have in the instance of SDoC compliance documentation.</p> <p>We propose the commission clarify the roles and responsibilities of Manufacturer, Importer, Distributor and Retailer such that all parties have clear expectations. (Note see revision to EU RED and EMCD (consistent with the EU's New Legislative Framework):</p> <p>Excerpt from Radio Equipment Directive (RED) 2014/53/EU Article 2.1:</p> <p>“(12) ‘manufacturer’ means any natural or legal person who manufactures radio equipment or has radio equipment designed or manufactured, and markets that equipment under his name or trade mark;</p> <p>(13) ‘authorised representative’ means any natural or legal person established within the Union who has received a written mandate from a manufacturer to act on his behalf in relation to specified tasks;</p> <p>(14) ‘importer’ means any natural or legal person established within the Union who places radio equipment from a third country on the Union market;</p> <p>(15) ‘distributor’ means any natural or legal person in the supply chain, other than the manufacturer or the importer, who makes radio equipment available on the market;</p> <p>(16) ‘economic operators’ means the manufacturer, the authorised representative, the importer and the distributor;”</p> <p>Furthermore, we urge the commission to review the EU Directive 2014/53/EU, (RED) Articles 10 through 15, inclusive as each party's role is defined with clear expectations of the</p>

	<p>relationship with the manufacturer. We propose that the FCC use this as a framework to define their own version of roles and responsibilities for each party.</p>
30	<p>With regards to the Commission’s request whether to include modification information into the SDoC included within the manual or other supporting documentation, we DO NOT support specific indication of modification information within the SDoC provided with the equipment. The reason for this position rests on the fact as manufacturer modify the equipment, numerous types of changes may have no effect on compliance (e.g. color of paint, plastic bezel modification). Furthermore, manufacturers are not likely to throw out manuals already printed when a modification of the SDoC necessary.</p> <p>We support the requirement that the responsible party maintain sufficient records of any subsequent changes affecting regulatory compliance.</p> <p>We do support detailed contact information be provided. The scope and content of the contact details should be sufficient to ensure any interference / non-conformity issues may be promptly and adequately addressed.</p>
31	<p>We have noted that manufacturers, suppliers, distributors and importers are frequently confused regarding product compliance for devices not bearing the FCC symbol. Like many other marks of conformity used in other economies, such as the CE mark, C-Tick (now RCM), VCCI mark, KCC symbol, etc., the FCC symbol has been viewed by many parties (including the general public) as the FCC’s symbol for compliance for any type of product. We therefore urge the Commission to consider leveraging the already present public view of the FCC Symbol as a uniform mark of conformity for unintentional radiator products. Furthermore, we urge the commission to adopt rules consistent with omission of the FCC symbol for products subject to Certification procedure. We propose that the finished product compliance procedures require evaluation of unintentional radiator test reports as part of the TCB review process.</p> <p>With all due respect, the FCC 2-part warning appearing on many products is frankly ignored or completely unimportant to end users. With product size constraints for many commercially available devices shrinking in size¹ and expecting product size to continue to shrink dramatically over the next decade, the requirement to add bulk text to the product label is somewhat meaningless. We propose that the commission retain the FCC’s 2-part warning listed in 15.19, however require that the statement be included within the users manual and optionally may additionally be placed on the exterior of the product (this also harmonizes with Canadian requirements in IC RSS-GEN).</p> <p>Most products which include wireless products are already subject to certification requirements. The Commission’s proposed rules require a responsible party for SDoC and also a responsible party for the Grant. It does not make sense to require two separate responsible parties and equipment authorization routes for the same product. The exception to this case is when an OEM incorporates a certified module into their equipment; only in this case are the two responsible parties warranted; one for the unintentional radiator (host) and one for the intentional radiator (radio).</p> <p>The purpose of this proposal is to segregate the two compliance requirements further simplifying and streamlining product compliance procedures. The SDoC procedure for unintentional radiators should be applied only and exclusively to products subject to SDoC</p>

¹ <http://www.scientificamerican.com/article/microprocessor-computer-chip/>

	<p>while products subject to certification should only and exclusively apply certification labelling requirements. Presently, the TCB scheme does not include evaluation of the unintentional radiator data within a certification filing because there are overlapping equipment authorization schemes simultaneously applicable to the product. However in other economies (i.e. Canada), all aspects of the finished product are required to be evaluated as part of the certification review. The same requirements should be applied in FCC rules; a product subject to certification should require review of not only the intentional radiator part, but also the unintentional radiator part. By separating the labelling requirements, manufacturers, importers, enforcement staff, etc. will have clear expectations on the labelling requirements and overall product compliance will be assessed appropriately for each type of review:</p> <p>Certified Device: FCC ID SDoC Device: FCC Symbol SDoC Device with a certified module: FCC Symbol + Contains FCC ID:</p>
32	<p>We support the proposal to continue voluntary option to use certification procedure for unintentional radiators of any category (expanding the options currently available). The EU CE Marking scheme contains this provision and it is utilized by many industries because compliance is of utmost importance to these specific sectors. Eliminating the option may force independent market sectors to rely upon the manufacturer’s statement which in many cases may be an undesirable or insufficient substantiation of compliance. By leaving the option available to responsible parties, a third party TCB certification can be issued which is a much stronger statement of conformity, giving confidence to the market sector and/or general public that equipment has been properly tested and meets compliance requirements according to the specific rules. And furthermore subjects these products post market surveillance requirements already in place for certified products².</p>
39	<p>We support the Commission’s proposal to codify generally applicable modular approval rules to address both licensed and unlicensed devices.</p>
40	<p>While we support the Commission’s proposal to continue both modular approval and limited modular approval requirements, we request the FCC publish more specific expectations for the manufacturer (or OEM) responsibilities when any one of the 8 requirements are not met. For example, it has been historically required that modular approvals without shielding undergo subsequent host-specific testing in order to be authorized.</p> <p>To note: our experience has demonstrated that the primary use of modules is not for end-user installation, however instead for incorporation into another product prior to marketing. We urge the Commission to consider the current practical use of modules as applicable to OEM installation as well as future use of modules as applicable to end-user installation. We propose that these two categories of module require specific (yet different) documentation. We DO NOT propose that the module should be treated any differently within the certification program, however that only the supporting documentation requirements differ between the two category types.</p>
41	<p>We support the Commission’s proposal to remove “split” module rules.</p> <p>While we do support the Commission’s proposal for certification of a single chip, we urge the Commission to incorporate stringent documentation requirements for such cases. As processing speeds and transmitter frequencies continue to increase, the future of module</p>

² <https://apps.fcc.gov/oetcf/kdb/forms/FTSSearchResultPage.cfm?id=20540&switch=P>

	<p>manufacturing may be such that manufacturing process tolerances alone may be enough to render a module non-compliant. This departure from traditional hardware certification requirements will be a welcome relief to many module vendors, however places additional restrictions on the OEM which they may or may not be prepared to address if the module vendor's documentation does not clearly identify the obligations and responsibilities of the OEM. Therefore, we believe this option provides little benefit to the overall industry, however does provide significant benefit to specific markets (i.e. cell phone manufacturers).</p>
42	<p>The concept of the infinitely configurable platform is already being pursued by manufacturers because there is market pressure for such novelties which in the future is likely to become reality.</p> <p>When evaluating the number of possible combinations and permutations of equipment configurations with wireless devices in close proximity, the possible different results of each configuration of wireless device could vary dramatically for the unintentional radiator portion, the wireless portion and RF Exposure assessment.</p> <p>Our expertise with EMC/wireless testing has demonstrated that:</p> <ul style="list-style-type: none"> a) Devices with significantly different hardware configurations provide significantly different unintentional radiator results (sometimes to the point of non-compliant). This applies equally to devices which have or have not been previously tested. This effect is a well-known source of frustration to personal computer peripheral manufacturers: when attempting to test the product as a system, quite frequently, a supposedly compliant host product is discovered to be a problem during an EMC test for the peripheral. b) EMC collocation test results (i.e. third order intermodulation products, harmonic mixing, and changes to harmonic emissions) very seldom occur when modules are placed in close proximity and where the manufacturer has utilized proper hardware design. c) Portable RF exposure evaluation of multiple pluggable modules may become problematic due to the localized surface current distributions. SAR testing has demonstrated that slight modifications of nearby structures may significantly affect RF exposure hazard. This effect is dramatically reduced when evaluating products for mobile RF exposure conditions. <p>We are not opposed to the commission prescribing rules for pluggable configurations of hardware into a specified host platform. If the commission pursues this avenue, we request the commission publish guidance on minimum configuration test requirements to address the most likely sources of interference and RF exposure hazards. We propose the commission adopt stringent requirements for pluggable configurations used in portable RF exposure conditions.</p>
46	<p>We support the Commission's proposal to remove the current SDR procedures in place of requirements for all transmitters.</p>
55	<p>We support the Commission's proposal to permit certification of a family of similar products. We support the requirement to provide unique identification of each family member (model, number, hardware number, etc). We discourage the strict use of the term "model" number because there are few instances of consistent use of this term (many manufacturer's use part number, SKU, Hardware Number, Packaging Number, Version Number or any other conceivable structure to identify variations of their equipment.)</p>

	<p>The proposed rules under 2.924(b) require that the initial application for certification include identification of family members, however does not prescribe any action for additional family members to be added. Having a public record against which approved family members can be verified is rendered ineffective when additional family members are added or their identification updated. We therefore propose that the commission consider one of two possible options to address this issue:</p> <ol style="list-style-type: none"> 1) (PREFERRED) Permit TCBs access to add additional exhibits to the original application filing at any time. <p style="text-align: center;">OR</p> <ol style="list-style-type: none"> 2) Require PClI application to provide clear public record of approved family members <p>We urge the commission to permit option 1 because it is the most efficient method to provide clear demonstration of compliance for product family members. The process would simply require the responsible party to submit a request to the TCB which issued the grant. The TCB can provide any necessary conformance checks to ensure continued compliance and then append the original filing with an additional letter identifying the new family members (including any extra updated information such as new users manual, etc). This method would significantly streamline a family approval, provide clear public documentation of approved family members and would not create unnecessary application filings.</p>
69 70 71	<p>We DO NOT support the option for third parties to request certification of equipment without consent of the original grant holder as in the proposed 2.1043(c) rules. There are both practical and technical reasons for this:</p> <ol style="list-style-type: none"> 1) The third party vendor (without support of the original responsible party) cannot provide the necessary documentation requirements required for a new grant of equipment authorization (Section 2.1033). Therefore rendering the option moot; the action cannot be completed by definition. 2) The new party will be required to maintain continued compliance throughout the lifetime of the product which without a contractual notification from the original responsible party product hardware changes would (over time) render the third party grant insufficient without any effective means of updating the certification because they are not in complete control of the product design and have no contract with the original grant holder. Again, this option would (over time) create more problems than the solution intends to resolve. 3) With firmware / software code becoming much more integral to product compliance, for the third party which has no control over the software or firmware updates, they will not be capable of maintaining compliance for their new certification. Again rendering this option insufficient by definition. <p>We urge the Commission to require third party modification can only be made with permission by the original grant holder, this includes new FCC ID and proposed rule 2.1043(c) filings.</p> <p>In order to promote innovation, we propose that the commission’s rules facilitate an approval process to “authorize” third parties making modifications; for example, automatic notification to the third party grantee when additional certifications (PCII) have been filed. Perhaps the Commission could consider a process to facilitate obtaining permission from the original grant holder?</p> <p>In any case, the commission’s equipment authorization system should not be intentionally designed so as to create additional future problems for responsible parties.</p>

	<p>In order for the EAS to properly address this type of filing and as an alternative to prohibition of 2.1043(c) filings without permission from grantee, we propose the commission institute automatic notification of PCII applications to the original filing for any proposed rule 2.1043(b) filing. In other words, any new responsible party who has filed for proposed rule 2.1043(c) application filing should be automatically notified of a 2.1043(b) PCII modification of the original filing upon which their compliance is based. The commission's correspondence should reiterate the new grantee's responsibility to ensure continued compliance of the product.</p>
74	<p>Regarding repairs or refurbishing of equipment, we DO NOT support the commission's proposal to require equipment certification requirements for repairs to the equipment. The number of possible combinations and permutations of repairs for any one give device will vary depending on the individual repair. This rule change may render repair / refurbishment industry financially impractical. We do not support any development or rule making which further enhances a "take-and-toss" mentality toward electronic devices. Our culture rooted itself with pride by our innovation to repair, reuse or repurpose various technologies. The proposed rules go against global recycling initiatives by limiting the types of repairs which may be legitimately made to products with minimal impact to overall product compliance.</p> <p>In the instance where a manufacturer has an established refurbishing procedure which affects compliance (for instance an enclosure defect repair or antenna grounding connection problem), then the manufacturer should be required to publish this repair procedure as public record. In this way, repair and refurbishment facilities may utilize uniform procedures consistent with maintaining continued compliance.</p>
75 76	<p>As we noted earlier in our comments to paragraph 30, we do support detailed contact information be provided. The scope and content of the contact details should be sufficient to ensure any interference / non-conformity issues may be promptly and adequately addressed.</p> <p>To this extent, for the purpose of SDoC, there should be some reasonable contact information to facilitate adequate resolution of non-compliance. For many countries (i.e. Australia, EU, Korea, Signapore, Canada and many others), an in-country representative is mandatory in order to gain entry into the market. With current requirements lacking such a contact, it places the US open to potentially non-compliant products without recourse for enforcement.</p> <p>We support an in-country representative, however only to the extent that this representative can be contacted to relay or facilitate delivery of information to the responsible party. The representative would be required to notify the Commission in the case where the grantee is non-responsive.</p>
77	<p>The proposed rule changes regarding 2.1033 offer confusing and potentially misleading opening text. The statement in the proposed rules, "An application for certification shall be filed electronically through the Commission's Equipment Authorization System (EAS) with all required information."</p> <p>This text is misleading because the information is actually first filed using a TCB; the FCC has closed any applications directly to their EAS and therefore responsible parties will likely be confused as to the true intent of this clause. We propose the commission clarify the clause to be consistent with the current use and intent of the overall Equipment Certification process. Namely that an application for certification shall be filed through the applicant's choice of TCB</p>

	<p>who shall upon successful application review provide all required information electronically through the EAS.</p>
78	<p>We support the notion of permitting new certifications based on previous certification data, when accompanied by permission of the original grant holder. (Please see comments in Item 69/70/71 above). There is significant benefit to the manufacturing community and to the commission’s database management to leverage a “copy” of previous information already on file. Most frequently, the referenced portions of the original certification comprise a substantial portion of necessary requirements whereas the modification includes supplemental data (e.g. additional radiated spurious emissions data, or updated RF exposure assessment).</p> <p>However, in order that this process is not overly burdensome for the Commission nor overly confusing to the manufacturing community, we propose the commission utilize automatic notifications to the party filing proposed 2.1043(c) application upon any change to the original grant (e.g. 2.1043(b) modification filing). See also our comments combined under items 69/70/71 above.</p>
79 90	<p>Having operated as a TCB since the inception of the TCB program, we find that the vast majority of post-grant changes occur within the first 90 days following the grant. While the Commission has traditionally allowed 30 days for exhibit updates, we find that manufacturer’s often have not received public feedback or inquiry and may (for example) require updates to their users manual and do not want erroneous information perpetuated from the FCC website. We therefore support continuation of TCB-editing of the grant. However, we propose that the post grant editing period extend beyond the presently allowed 30 days. Whereas the Commissions decision for the 30-day window extends to large quantity consumer devices, this timescale is completely inappropriate for small scale manufacturers and non-consumer industries which continue to comprise more of the applications for certificated devices. We propose to extend the application editing period to at least 90 days following the date of grant.</p> <p>We DO NOT support processing of PCII applications for items which are not supported by 2.1043 (or KDB) requirements. It has been our understanding that changes not qualifying for PCII cannot be filed and are therefore surprised by this notice’s announcement that such changes have been utilized. To our knowledge the processing requirements for PCII to update specific documentation or to correct typos have never been allowed (except perhaps on rare circumstances and only under direction by the FCC staff).</p>
85 86 92	<p>(92) In summary, we fully support a “provisional” grant of certification as discussed in paragraph 92 of the Notice, however with the following commentary:</p> <p>(85/86) Regarding the commission’s inquiry on short term confidentiality (STC) procedures, we urge the commission to remove all STC requirements in favor of a more appropriate application processing mechanism. To explain this proposal, we provide the following comments:</p> <p>Generally, the manufacturers requesting STC are trying their best to procure competitive advantage without releasing their plans to competitors. However in an increasingly digital world, the exhibits open for public inspection (test report, ID label, even simply the rule part) may still provide too much identifiable information to competitors and thus defeat the purpose of the request. The problem with STC requests is that of enforcement. The TCB handing the information has no means of monitoring or enforcing the target date set by the manufacturer. And in fact, there is nothing to prevent marketing of the equipment without the TCB’s knowledge thereby usurping the STC rules. Under the current STC rules, the grant is available publically. Therefore the retailers or the general public are provided the false understanding</p>

	<p>that the equipment is approved for marketing. Therefore, we express concern over the current and proposed STC procedures because they do not address the core issue.</p> <p>For the manufacturer, the core issue is to provide a method of importation and distribution of products prior to marketing but without giving any details to their competitors. We therefore assert that STC is really not the issue and as a process should be removed from application filing requirements. We assert that there exists a mutually beneficial alternative which obviates STC procedures to meet the real requirement which provides the manufacturer and customs a validation mechanism for importation without requiring public release of sensitive data and also provides a method for TCB enforcement on the release of the grant of equipment authorization (date the equipment can be marketed). The problem with the current scheme is that the grant of equipment authorization is released giving resellers, importation authorities and the general public the false impression that the equipment can be marketed. The current scheme employing STC is therefore intentionally deceiving and therefore should be replaced with a more appropriate scheme, such as that proposed below:</p> <p>We propose the Commission adopt a “placeholder” authorization which can facilitate validation of the FCC ID for importation and distribution, however without releasing sensitive information and furthermore without providing resellers incomplete or misleading information regarding the application status by not publishing the grant (certificate of equipment authorization). The “placeholder” would consist of identification of the Grantee, and the FCC ID, however would withhold all other information from public inspection, including the form 731. The FCC ID would be verifiable on the public FCC database therefore allowing importation authorities to verify the product is a legitimate soon-to-be-authorized device, however access to the grant, the form 731 and any exhibits would be restricted from public domain thereby providing accurate portrayal of the certification status.</p> <p>From the TCB processing side, the application would be in a “quasi-approved” state. For all practical purposes, the application would be complete and ready to approve, however is not yet released. In the event that the Commission staff require review of any documentation, the application materials would be available. The same application checks and balances could be in place as required for any other application. However, in this state the actual certificate of equipment authorization is not available; the actual certificate could only be created after release of the application to the public. This would provide a means for any reseller, importer or customs official to verify that the product can be marketed and would provide a defined date on the grant when the product was first legally acceptable for marketing.</p> <p>By incorporating such a scheme the requirement for STC is obviated because the root issue has been resolved using another method. The proposed procedure is only a mild modification of the existing eFiling system which would provide a solution directly addressing the core issue and most importantly provide TCBS a method to enforce cooperation with manufacturers to ensure proper application of FCC rules.</p>
88	We fully support the Commission’s proposal to automatically withhold from public inspection the identified exhibit categories without requirement for justification.
95	<p>Although the commission addresses the new proposals for electronic labelling and modular approval labelling, the commission has not addressed the issue of externally accessible label, visible at the time of purchase.</p> <p>While the requirement is meant to provide the end user with knowledge that the product includes a certified device, the majority of the general public does not really care or understand why this is important. The majority of devices which utilize various schemes to provide “time</p>

	<p>of purchase” visibility to the FCC ID, may be obviated by retailers who assemble products for their clients prior to purchase, or resellers who include additional software bundles to the equipment, or installers who bolted the equipment to the wall without the end user ever seeing the back side.</p> <p>The visibility at time of purchase requirement has further stunted small-quantity manufacturers who desire to “repackage” an existing certified product into a new enclosure. For instance, a certified finished product designed for indoor use could be wrapped into a weatherproof plastic enclosure and resold into an expanded market totally different from the original intent. The additional plastic enclosure is benign to EMC and transmitter performance. The present FCC rules require that the owner of the plastic enclosure provide FULL testing and certification on the product for which only a minimal change was made.</p> <p>We propose the commission permit proposed rule 2.1043(c) applications for manufacturers “repackaging” equipment into alternate enclosures. This flexibility would permit more innovation and market access especially to small quantity / niche market manufacturers allowing them to leverage existing certification materials.</p>
Proposed rule 15.201(a)	<p>The rule for 15.201(a) states that equipment meeting the specified requirements SHALL comply with SDoC requirements. We urge the commission to modify this text specifically to address instances where numerous transmitter technologies exist within a given product.</p> <p>There is certainly no reason that a manufacturer of a product meeting the requirements of 15.201(a) could voluntarily elect to utilize certification for the product, especially when the product is combined with another transmitter also subject to certification.</p> <p>We therefore propose to modify the “shall” statement in 15.201(a) to permit voluntary certification of such equipment.</p>
Proposed rule 15.615(a)(4)	<p>The commission’s proposed rule change to 15.615(a)(4) does not make sense in light of 15.607 rule requirements: Excerpt from 15.607: “Access BPL equipment shall be subject to Certification as specified in §15.101.”</p> <p>Therefore, the proposed rule change relating to Access BPL devices should not require any indication of SDoC procedures in order to be consistent with current rules.</p> <p>We propose alternate 15.615(a)(4) text as follows: “(4) The manufacturer and type of Access BPL equipment and its associated FCC ID number. In the case of Access BPL equipment that has been authorized prior to [effective date of rules] and subject to verification, the Trade Name and Model Number, as specified on the equipment label.”</p>
Summary E	<p>We DO NOT support the commission’s proposal to remove test laboratory accreditation requirements from proposed SDoC product authorization requirements. The test laboratory requirements for testing modern unintentional radiators comprises is significant investment in laboratory equipment, test facility validation (e.g. NSA or SVSWR requirements), proper application of test procedures and test laboratory personnel competence. We assert that the benefits gained by not requiring accreditation for this class of equipment far outweigh the future costs of non-compliant products, interference issues, enforcement actions and manufacturer liability created by inappropriate, incorrect or omitted test data. This has already been observed in the wireless approval area with regard to specific regional test report</p>

	<p>practices which have historically exhibited a propensity for incorrect or falsified data, especially for non-accredited laboratories.</p> <p>Furthermore, now that the commission has removed the 2.948 listing requirement, there is no control over test facility site validation requirements which include significant technically challenging requirements which many sites may require specific construction or additional materials to meet (i.e. CISPR 16 SVSWR calibration requirements up to 18GHz). With no entity keeping track or evaluating the test sites, how can a manufacturer be assured that an unaccredited test laboratory meets such requirements – or for that matter, even know that they should request such information. In our experience the requesting party is completely ignorant of any test laboratory requirements and will therefore submit the job to whichever is the lowest bid, regardless of possible future consequences.</p> <p>It is our experience that nearly all manufacturer’s desire to provide correct, complete and consistent compliance assessment to the applicable rules, however the operating budget and marketing timeline demand acceptance of the “best deal” for their company. In many cases, this involves a third party “agent” to procure services on the manufacture’s behalf. When their request is processed by a third party vendor and when accreditation is not mandatory, the resultant data provided to the manufacturer may in fact be misrepresented. Even for those manufacturers with on-site testing laboratories, the degree of competence necessary to properly address SDoC equipment is not insignificant.</p> <p>Nevertheless, we do not disregard the Commission’s desire to minimize impact to manufacturers and provide market access reasonably and affordably. We also desire maintain an appropriate level of equipment, facility validation and personnel competence assessment. Therefore, we propose that the commission require accreditation for products subject to SDoC rules, however that the SDoC scope of accreditation be valid for up to 4 years thus minimizing the impact and thus cost of testing.</p>
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Respectfully submitted,

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