

**Before the  
Federal Communications Commission  
Washington, D.C.**

**In the matter of:**

**Amendment of 73.207, 73.210, 73.211,     )  
73.215, 73.3573 of the Rules            )     RM-11727  
  )**

**COMMENTS OF SELLMAYER ENGINEERING**

The engineering consulting firm of Sellmeyer Engineering hereby submits these comments in response to the Commission’s July 17, 2014 Notice of Proposed Rulemaking in the above-captioned proceeding. In that Notice, the Commission solicited comments on its various specific proposals to amend the FM Rules to permit a new Class C4 FM Station Class.

This Firm is a sole proprietorship established in 1980 by J. S. “Jack” Sellmeyer following an extensive background in the Broadcasting Industry beginning as a summer relief operator at a local daytime AM station in 1956. I have extensive experience in Radio and Television Engineering, having spent the past 58 years in the industry; the past thirty five in active practice before the Commission.

I have reviewed the Notice and have the following comments:

**A:** I suggest the Staff review the history which led to the current hodgepodge of Classes and Subclasses of FM Stations with an eye toward simplification of the system. To that end, I submit a brief history of how this came to pass and a simple suggestion on how to simplify the system and maximize service to the communities which are most in need of improved service for their survival.

The “FM BROADCASTING SERVICE” (“FM”) was established in its current form in the 1947 time frame immediately following the end of World War II along with the “TELEVISION BROADCAST SERVICE” (“TV”). Initially three classes of service were created. These are as follows:

<b>CLASS A</b>	<b>3.0 KW ERP</b>	<b>300 FEET AAT</b>	<b>(Rural Areas &amp; small towns)</b>
<b>CLASS B</b>	<b>25 KW ERP</b>	<b>500 FEET AAT</b>	<b>(Densely populated areas in the Northeast &amp; California south of the 40<sup>th</sup> Parallel)</b>
<b>CLASS C</b>	<b>NO PWR LIMIT</b>	<b>2000 FEET AAT</b>	<b>(Balance of the country)</b>

Two ZONES were established within the continental limits of the United States and its Territories for differentiation of Class B and Class C assignments. There was no power limit on Class C stations in the Rules at that time. The lower limit on Class C stations was 25 KW. The ZONE MAP is attached to this document. Class B assignments were limited to Zone I and Zone IA with an upper limit of 25 KW. Class A assignments could be made to Zones I, IA and Zone II. Basically, Zones I and IA were limited to densely populated areas of the Northeast, the West Coast south of the 40th parallel in California and to the Virgin Islands and Puerto Rico. Zone II consists of the rest of the United States outside of the area within Zones I and IA, Hawaii and Alaska and the northern portion of the four New England States which border the Canadian Border.

A “TABLE OF ASSIGNMENTS” (the “TABLE”) was created which allocated one or more channels to most markets according to size and most of the smaller towns in each State, to provide a uniform service according to population and provide some assurance that at least one or two stations’ service would be available to each community.

*Applications were prepared on the basis of avoidance of interference to other authorized and proposed stations. The system was then a ‘DEMAND BASED’ system.*

Initially, a large percentage of the existing Standard Broadcast Stations (“AM STATIONS”) in the larger cities applied for and received construction permits within the first two years of the service availability. FM Receivers were more expensive than AM receivers in that time period for the simple reason that the circuitry required to properly decode an FM signal was substantially more complex than that of an “All American 5” AM receiver. The receivers were not as stable with respect to tuning a specific station and would often drift off frequency due to the state of the art in the time period. The noise floor was very low and the frequency response and distortion were much better than a comparable AM receiver. Good quality AM receivers were widely available on the market for home and automobile use. The audio bandwidth was much wider than today’s AM

Receivers due to the filter technology of the era and the program material and recordings which were played on the radio stations did not sound materially different on a good quality home receiver. No FM receivers were available for automobile use in the early days of FM Broadcasting and there was not much incentive for the public to convert.

In the 1952/53 time frame a large percentage of the FM Licenses were returned to the Commission for cancellation and the FM Band thinned out considerably. In some markets, facsimile service for newspaper delivery and some early background music businesses sprang up, but usage of the band was sparse. In the mid to latter 1950's multiplexing of subcarriers became possible and many stations offered one or more background music services by multiplexing of subcarriers onto the FM Carrier and transmitting subscription music such as Muzak and other services to businesses within the stations coverage area for a monthly fee. This provided a steady income to support the operating costs of the station. In turn, many new applications for FM Stations were filed and new stations were placed in service in markets of all sizes. Some stations began to gain traction in all markets and many daytime only stations in the secondary markets applied for FM licenses so they could provide fulltime service to their local communities.

The "TABLE OF ASSIGNMENTS" was abandoned in the early 1950's period and applications were accepted on any channel which was suitable from an interference avoidance standpoint. The prohibition of Class C assignments in Zones I and IA continue to the present time with a few exceptions, No Petition for Rulemaking was required to add a channel in a particular market.

In the 1964 time frame a new TABLE OF ASSIGNMENTS appeared. The applications were still interference based and a suitable showing was required. DIRECTIONAL FM ANTENNAS were not authorized, with a few exceptions in densely populated areas under limited circumstances. With demand increasing in the late 1960's, a power limit of 100 KW ERP was placed on the Class C stations. The stations operating above the limit, including some operating within Zones I and Zone 1A were grandfathered.

In the late 1960's and early 1970's affordable, stable FM receivers became available and AM/FM receivers began to appear in automobiles. FM Stations began to develop wider audiences and appear in the rating books in most markets by the mid to late 1970's. With the increased demands the "TABLE OF ASSIGNMENTS" began to fill up in many

markets. A “PETITION FOR RULEMAKING” was then required to amend the “TABLE” to add a new channel to a market where the TABLE was fully built out.

In the early 1980’s Mass Media “Docket 80-90” was placed on Public Notice for comments. This resulted in a large number of new allocations spread willy nilly all over the country, some with mountains between the “Allocation Site” and the proposed “Community of License”. Others were allocated in the middle of large bodies of water where they could not be constructed. The result was an “overload of applications” which the Staff could not process in an efficient manner. This led to the creation of the Class C-1 and Class C-2 subclasses bridged the gaps between Class A and Full Class C channels. This resulted in a “simplified” review process which tossed out the required interference based allocation study and the “Spacing Study” was introduced to reduce the burden on the Staff.

A proposed facility meeting all of the “SPACING AND CLASS POWER LIMIT CRITERIA” to all other affected stations was assumed to be in compliance with the interference standards and is deemed grantable without the necessity of an interference study. In the majority of cases negligible interference resulted from the new system.

Petitions for Rulemaking are required to amend the table of allotments and those attracted the interest of speculators who had no real intention of building out the proposed facility, and merely wanted to enrich their pockets by applying for multiple facilities with the intention of reselling the resulting permits to those who really intended to serve the proposed service areas.

Later, the Commission implemented FILING WINDOWS which opened the floodgates to the speculators. This had the effect of attracting multiple applications for facilities which served large areas.

This firm represented several serious applicants in large markets who intended to serve the market(s) involved, but could not afford the large attorney fees required to argue a hearing case. One such case was Channel 227, Haltom City, Texas which, at one time had approximately twenty applicants. My initial client dropped out of the group due to the costs for legal representation. Approximately nine years into the hearing, I was hired by another applicant the sole applicant which met all of the Comparative Hearing Criteria used to decide the winning applicant in contested cases.

After nearly ten years in this proceeding, the ‘ground rules’ abruptly changed due to a court decision resulting in the comparative hearing criteria being thrown out. A year later, the Commission decided not to decide and directed the remaining applicants to decide among themselves a settlement method to decide the successful applicant. A price for the payoff to the losing applicants and a formula for distributing the resulting fund was agreed to and a daylong

auction was held by telephone conference call. I represented the ‘preferred’ applicant in the final part of this proceeding, including testimony before the Hearing Examiner at the Commission’s Office. Ultimately a ‘third party’ who was not one of the original applicants was awarded the construction permit. THIS IS AN EXCELLENT EXAMPLE OF THE ABSURDITY OF THE PROCESS.

The present method of allowing new applicants to enter the business is to open a FILING WINDOW for a specific facility, or group of facilities, and allow a certain period of time to expire so that potential applicants will be alerted in time to pay the required ‘entry fees’ to the Commission in advance of the AUCTION DATE and then bid against each other for the privilege of a grant of an opportunity to file a FORM 301 for a Construction Permit for the facility. In a large percentage of cases the resulting Permit is sold to a third party. The cumulative effect of this procedure is to dissipate the capital of the final recipient of the Permit and leave much less money to construct and operate the proposed facility. The majority of the invested money goes to US GENERAL FUND and not into the local community where it is needed to construct and operate the facility. I submit that this does not fulfill the requirement of the COMMUNICATIONS ACT OF 1934, as amended to operate the licensed facility in the Public Interest, Convenience and Necessity.

**B: A SIMPLE FIVE STEP PROCEDURE WILL VASTLY SIMPLIFY THE PERMITTING PROCESS, REDUCE STAFF TIME REQUIRED TO PROCESS APPLICATIONS AND ASSURE FULL COMPLIANCE WITH THE COMMUNICATIONS ACT OF 1934:**

**1: ELIMINATE ALL FILING WINDOWS.** They are not necessary and create impediments to the prompt provision of new service. They divert capital funds needed to construct and operate the proposed facilities to third parties who have no real interest in the facilities for which they are applying.

**2: ELIMINATE THE TABLE OF ALLOTMENTS.** It was initially published to assure an adequate distribution of facilities to all areas of the country. The need for such a table has long since passed.

**3: Evaluate all applications on an interference based study** using the same Rules applicable to the Reserved Portion of the band. Require a full Interference Study with the initial application which shows all of the affected facilities and the absence of mutual interference, if applicable or full clearance of all appropriate contours.

**4: ELIMINATE THE FM CLASSES AND SUBCLASSES;** as they will no longer have any real meaning following the return to an interference based allocation system. Allow a station to operate with any power, with a suitable directional antenna, if required to avoid interference to an authorized or proposed station.

The Spacing Standards were adopted as an administrative convenience in the days before computers were common and many hours of analysis using Slide Rules, Propagation Charts, Topographic Maps and Draftsmen to calculate and plot all of the resulting contours that were required. With the advent of Computerized Allocation Tools, the need for manual computations and plotting no longer exists. Interference studies are done on a computer terminal in the reviewing Engineer's office in a few minutes. This no longer justifies all of the many impediments to prompt provision of new services which have resulted from the many Rule Changes which the Staff has instituted over the past fifty years. Adding another Subclass C4 will only perpetuate the long string of such actions. It will do little to nothing to alleviate a perceived coverage problem for a tiny minority of stations. A return to an interference based allocation system using directional antennas where necessary will facilitate maximum of coverage for all stations.

5: RETURN TO A 'FIRST COME FIRST SERVED BASIS' for modifications and new station applications. This was used very successfully in the period immediately following the early 1950's. If an application fully complies with the applicable Rules, accept the application and place it on a thirty day cutoff list. If the application is unopposed and is in full conformance with the interference standards used in the Reserved Portion of the FM Band, grant the application. If it is opposed, allow a short period of time for settlements between those who have filed fully conforming applications; then grant the successful application.

We realize that certain policies and, possibly some legislation, will be required to correct certain legislative directives which no longer serve any purpose. So doing will greatly simplify the application process, provide prompt new or improved service to the public and allow more appropriate use of the diminishing CAPITAL FUNDS in the local markets.

Respectfully submitted:

  
J. S. Sellmeyer P. E.



September 5, 2014