CARL T. JONES
CORPORATION

STATEMENT OF CYNTHIA M. JACOBSON, P.E.
IN SUPPORT OF AN APPLICATION FOR
MODIFICATION OF CONSTRUCTION PERMIT
FCC FILE NO. BP-20011130AAS
KKOL - SEATTLE, WASHINGTON
1300 kHz - 50.0 kW DAY/47.0 kW NIGHT - DA-2-U

Facility ID: 20355

Applicant: Inspiration Media, Inc.

I am a Radio Engineer, an employee in the firm of Carl T. Jones Corporation, with offices located in Springfield, Virginia.

My education and experience are a matter of record with the Federal Communications Commission. I am a Registered Professional Engineer in the Commonwealth of Virginia, Registration No. 027914.

GENERAL

This office has been authorized by Inspiration Media, Inc. ("Inspiration"), licensee of Standard Broadcast Station KKOL, Seattle, Washington, to prepare this statement, FCC Form 301 (Section III), and the attached engineering exhibits in support of an Application for Modification of Construction Permit (FCC File No. BP-20011130AAS) to relocate the KKOL antenna system approximately 37.7 kilometers south of the existing site. The currently licensed site is owned by the Port of Seattle. The Seaport division of the authority is expanding facilities and the KKOL site lease was not extended. The station was required to

vacate the site on December 31, 2001. KKOL is currently operating with a Special Temporary Authority from a nearby temporary site.

KKOL is licensed to operate on 1300 kHz with a power of 5 kW. The daytime operation utilizes a nondirectional antenna, while a two-tower directional array is utilized for the nighttime operation (DA-N). The instant application proposes to develop a new site with the construction of four new towers. It is proposed to operate with a power of 50.0 kW daytime and 47.0 kW nighttime. Three of the proposed towers will be utilized for the day array. All four towers will be employed for the nighttime operation. This proposal constitutes a “minor change”.

ANTENNA SYSTEM

The antenna system will consist of four self-supporting towers, 85.5 electrical degrees in height. Three of the four towers will be utilized by KKOL for the day operation and all four towers for the night operation. The table below summarizes the pertinent heights of the proposed structures.

	Towers #1 - #4
Ground Elevation (meters)	3.0
Base Height (meters)	1.2
Radiator Height (meters)	54.8
Overall Height of Structure AGL (meters)	56.0
Overall Height of Structure AMSL (meters)	59.0

A vertical sketch of the towers is shown in Figure 1.

GROUND SYSTEM

The ground system will consist of 120 evenly spaced, buried, copper wire radials per tower. The radials will be 57.6 meters long, except where bonded to the transverse copper strap between towers. The location of the towers is shown in the property sketch of Figure 2.

FAA NOTIFICATION AND TOWER REGISTRATION

The proposed new antenna structures will be 56.0 meters AGL and 59.0 meters AMSL, see Figure 1. Since the proposed structures are less than 61.0 meters AGL and they pass the FAA slope test, no notification to the Federal Aviation Administration (FAA) is necessary.

Likewise, Tower Registration for the proposed structures is not required for those reasons stated above.

SITE AND SURROUNDING TERRAIN

The proposed antenna/transmitter location and surrounding terrain characteristics are depicted in Figure 28. The site elevation was obtained from the USGS 7.5 minute topographic map. The center of array NAD-27 coordinates for both the day and night arrays are:

North Latitude: 47-14-56
West Longitude: 122-24-18

An aerial view of the proposed site is shown in Figure 29.

COVERAGE CONTOURS

The present and proposed daytime service contours are shown in Figures 21 and 22. The proposed daytime 5.0 mV/m contour encompasses 96.8% of the city of license, Seattle, Washington.

The present and proposed nighttime service contours are shown in Figure 26. The proposed 4.9 mV/m nighttime interference-free contour and 5.0 mV/m contour. The 5.0 mV/m nighttime service contour will cover 81.6% of the city of license, Seattle, Washington.

It is respectfully requested for a waiver of Section 73.24(i) of the Rules be granted for the reasons stated below.

JUSTIFICATION FOR WAIVER OF 73.24(i)

KKOL was compelled to vacate its licensed site on December 31, 2001 (see BSTA-20011207ABG). The licensed KKOL site is owned by the Port of Seattle. The Port had been expanding facilities and would not extend the KKOL site lease. The licensed site which KKOL was compelled to abandon was centrally located within the City of Seattle. Since its removal from its licensed site, KKOL has operated with temporary facilities pursuant to Commission extensions of the STA, broadcasting from a surplused Navy supply ship moored in Elliot Bay on the Seattle waterfront, using a pole 92 feet high and a power of one kilowatt.

During the period before and after commencement of operation from its temporary site, KKOL's licensee has devoted itself to locating a site at which KKOL could be reestablished

with regularly licensed facilities. To achieve that goal, KKOL needs the consent of the owner of a site which may be used to serve Seattle, needs to be able to design a facility at that site which satisfies the FCC's AM assignment rules, and must be able to obtain all of the requisite permits from local land use permitting authorities. The site proposed herein satisfies these objectives, with the exception of the daytime coverage shortfall for which this waiver is requested.

Prior to being compelled by the Port to leave its licensed site, KKOL had obtained from the FCC two construction permits for relocation to the transmitter sites of other AM stations. Those permits had been obtained in anticipation that ultimately the Port would force KKOL off its licensed site. One permit authorized KKOL to relocate to the site of Station KIXI, Seattle. The second permit authorized relocation of KKOL to the site of KLFE, Seattle. The permit to relocate to the KIXI site was BP-19980403JC; the permit to relocate to the KLFE site was BPI-19970825AC. Ultimately, neither of these construction permits served to provide KKOL with a site to replace its licensed site. Efforts to proceed under the permit allowing a diplex operation at the KIXI site could not surmount difficulties in negotiating a lease acceptable to both parties, nor could KKOL achieve a degree of certainty that reconstruction to satisfy the owners of the site could be done in a way to satisfy local land use permit obligations. Relocating to the KLFE site became no longer feasible when an expanded band AM station, KTFH, began diplex operation at the KLFE site. Both KLFE and KTFH are owned in common with KKOL. It was determined that KTFH, which was awarded as an expanded band station

paired with KLFE, was most suitably operated from the KLFE site. On a technical basis, it was concluded that the signals of all three stations would be compromised if an attempt was made to use the KLFE site for a triplex AM operation.

Hence, at the time KKOL was compelled to vacate its licensed site and begin operation with an STA facility, KKOL was still without a permit to move to what could become a new licensed site; it had, however, filed an application for such a permit (BP-20011130AAS). That permit was granted March 31, 2004. As time passed, it became evident that objections by local authorities to use of that site were going to be exceedingly difficult, if not impossible, to overcome. Nevertheless, the licensee continued its efforts in that regard. Ultimately, while retaining some hope that it might overcome objections, it began a search for other possible sites. A test transmitter was authorized (in connection with commonly owned KTFH) in June 2002 in an area outside Seattle where land was available and local land use permitting processes seemed not likely to be a bar to development of a multiple tower AM facility. Unfortunately, measurements made from the test transmitter to determine conductivity in the area showed that the conductivity was wholly unsatisfactory due to the inability to serve the city of license for development as an AM site.

Many potential sites were considered and, for reasons directly related to the purpose for which the land would be acquired, found wanting.

Ten potential sites were given extensive consideration by KKOL. For various reasons (inability to achieve agreement with landowner, technical impediments, such as incorrect

orientation, spacing and/or tower heights, interference potential to nearby industrial uses, extremely inadequate service to Seattle, unusable property dimensions, etc.) all sites among the many explored by KKOL's licensee proved unusable, except for the site specified in this application. In addition to the other extensive consideration given to the ten potential sites, KKOL also had an analysis made of other Seattle AM stations to determine whether a collocation possibility existed which would be worth pursuing. At least twelve stations were examined; none could be made to work technically.

The elements of KKOL's site search saga are not any longer atypical for AM stations licensed to cities in major metropolitan areas. Tower sites are extremely difficult to secure in such areas for directional AM stations. Seattle itself has unique features that add to this widespread problem, presenting additional obstacles to locating AM radio towers. Seattle has to its west Puget Sound and to its east Lake Washington; both bodies of water are bounded by residential areas. While there are AM directional sites in use in these areas, local land use restrictions virtually prohibit the development of new such sites or the addition of new towers to existing sites. Areas further east and north of Seattle consist of terrain which is often so rough as to be unsuitable for multi-tower AM sites. Areas to the south of Seattle, such as the area for which KKOL held permit BP-20011130AAS, are quite heavily developed and largely residential, presenting insuperable obstacles to obtaining land use permits. Further south of the city is the Seattle-Tacoma International Airport, which serves as a further restriction to the development of radio towers. Many of the areas around Seattle are covered

by sensitive environmental restrictions, and substantial amounts of the land are occupied by military reservations and parkland.

The site proposed in this application is the best available site for KKOL. The owner of the site, the Port of Tacoma, has approved use of the site by KKOL. KKOL's review of land use requirements relative to the site persuades KKOL that it should not be blocked by objections or rulings arising on land use bases. As is shown in this application, a directional AM facility can be constructed that protects, both day and night, all AM stations entitled to protection under the FCC's rules.

The sole defect of this site is that it does not allow KKOL to meet the daytime coverage requirements of Section 73.24(i). The Commission has, in the past, confronted situations where AM stations simply could not serve the entirety of their city of license from any site that would be available for construction of the radio station and has waived its coverage requirements. It should do so here, where the deficiency is so small and the applicant, after the exhaustive efforts described above, cannot overcome the slight shortfall.

BLANKETING AND STATION INTERACTION

The population within the proposed daytime 1000 mV/m contour is less than 300 persons. The population within the proposed 1000 mV/m nighttime contour is less than 300 persons, therefore Section 73.24(g) of the Rules is satisfied. The present and proposed 1000 mV/m contours are shown in Figures 19 and 20.

In response to all complaints of blanketing interference, the applicant will undertake steps to mitigate the blanketing effects in accordance with the requirements of Section 73.88.

There is one AM station located within 3.2 kilometers of the proposed KKOL antenna site. There are three full service FM stations and one TV station located within 10 kilometers of the proposed site. It is expected that no detrimental interaction will occur with any station.

DAYTIME ALLOCATION STUDY

Nine stations were considered in detail regarding the daytime allocation[1]. These stations are:

KLDY	1280 kHz	Lacey, Washington;
KIT	1280 kHz	Yakima, Washington;
KKSL	1290 kHz	Lake Oswego, Oregon;
KACI	1300 kHz	The Dalles, Oregon;
KNPT	1310 kHz	Newport, Oregon;

[1] KIKN, Port Angeles, Washington on 1290 kHz was not considered in the daytime allocation study. On March 31, 2004 the Commission granted BP-20011130AAS to authorize KKOL to relocate its transmitter site and to increase power. That grant approved an interference reduction arrangement with station KIKN, Port Angeles, Washington, which is under common ownership with KKOL. Condition 6 of that construction permit states that before "program test authority for KKOL is granted KIKN, Port Angeles, Washington, ... must submit its license for cancellation in accordance with its interference reduction agreement." While KKOL cannot be reconstructed with the facilities specified in BP-20011130AAS because, as explained elsewhere in this statement, the transmitter site became unavailable, grant of the construction permit requested in the instant application would necessarily carry forward condition 6 of BP-20011130AAS. Because the KIKN license will be surrendered prior to KKOL being granted program test authority for the facilities specified herein, KIKN, 1290 kHz, was not considered in the daytime allocation study.

KZXR	1310 kHz	Prosser, Washington;
KXRO	1320 kHz	Aberdeen, Washington;
CHQM/CHMB	1320 kHz	Vancouver, Canada; and
KENU	1330 kHz	Enumclaw, Washington.

Figures 23 and 24 depicts the allocation situation for the above stations as they pertain to the present and proposed KKOL operation. The distances to all groundwave contours were calculated using the equivalent distance method. Contours were calculated at 5 degree intervals using ground conductivity values shown on the M-3 soil map. Tabulations of distances to groundwave contours and conductivity profiles are not included herein but can be provided upon request.

As depicted in Figures 23 and 24, overlap of the KKOL 0.025 mV/m and the KACI 0.5 mV/m contours presently exists. The proposed modification of KKOL will eliminate the amount of existing prohibited overlap.

No prohibited overlap of the 0.5 mV/m and 0.25 mV/m contours presently exists, nor will any occur between KKOL and KKSL, KZXR, and KNPT.

No prohibited overlap of the 5.0 mV/m contours presently exists, nor will any occur between KKOL , KXRO, and KIT. The existing overlap with KLDY will be decreased. KKOL's proposed 15.0 mV/m contour will not overlap CHQM's/CHMB's 0.5 mV/m contour. Likewise, the proposed 5.0 mV/m contour will not have overlap with CHQM's/CHMB's 5.0 mV/m contour, see Figure 24A.

Figures 23 and 24 depict that neither the present KKOL operation nor the proposed KKOL facilities will result in overlap of 25 mV/m contours with KENU.

NIGHTTIME ALLOCATION STUDY

The results of the nighttime study are shown in Figures 25 - 26. Figure 25 is a tabulation of the RSS calculations for co-channel and first-adjacent stations in which KKOL may impact. The proposed facility of KKOL will not raise the limit of any station.

The present KKOL operation enters the 50% RSS limit (50% exclusion bracket) of co-channel station KLER, Orofino, Idaho. The proposed KKOL facility will remain in the 50% RSS limit (50% exclusion bracket) of KLER, but at the required 10% radiation reduction at the appropriate vertical angle.

The proposed KKOL operation will enter the 50% RSS limit (50% exclusion bracket) of several applications filed for NEW facilities in Hawaii and Alaska during the last major window filing. In each instance, the proposed limit will be less than that authorized by the Commission in the KKOL outstanding construction permit authorization.

RADIOFREQUENCY IMPACT

The proposal described herein does not involve high intensity lighting as specified in Section 1.1307(a)(8), nor will it result in human exposure to radiofrequency radiation in excess of the standards specified in Section 1.1307(b).

On January 1, 1986, the FCC amended its Rules to implement the National Environmental Policy Act of 1969 (NEPA). This amendment established RF radiation protection guidelines to be used to determine if potentially harmful RF exposure is possible from an FCC-regulated transmission facility. Effective October 15, 1997, the FCC adopted revised guidelines and procedures for evaluating environmental effects of RF emissions. These revised guidelines incorporate two tiers of exposure limits based on whether exposure occurs in a "controlled" (occupational) situation or an "uncontrolled" (general population) situation. The FCC has also revised OET Bulletin No. 65 entitled, "Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields," to aid in the radiation exposure analysis. This bulletin, as well as other current literature, provides detailed information for conducting an analysis including mathematical equations that can be used to determine compliance with the Commission's guidelines.

CALCULATION METHODS

Verification of compliance with FCC-specified guidelines for human exposure to RF radiation was obtained from OET Bulletin No. 65. To obtain distance to compliance with the

guidelines, Table 2, Section 1 of Supplement A was used. The proposed KKOL facility will operate on 1300 kHz with a power level of 50.0 kW day/47.0 kW night (DA-2). A worst-case condition of 50.0 kW was assumed for each of the four towers. A fence at least 4 meters (13.1 feet) from the base of each tower will be constructed. This fencing requirement will satisfy both the occupational/controlled and the general population/uncontrolled MPE limits. The fences will be locked to preclude public access to the towers and appropriate warning signs will also be posted. If requested by the Commission, the applicant will conduct electromagnetic field strength measurements to establish that the MPE limits specified by the FCC are not exceeded.

It is submitted that the proposed KKOL station will not constitute a potential hazard to the quality of the human environment. Accordingly, the KKOL proposal, as described herein, should be categorically excluded from RF environmental processing under Section 1.1307(b) of the Rules.

OCCUPATIONAL SAFETY

Access to the KKOL antenna supporting tower bases will be restricted to authorized maintenance personnel only. KKOL ensures protection to station personnel or tower contractors working in the vicinity of the proposed towers. Procedures will be followed during times of service or maintenance of the transmission systems when necessary to avoid potentially harmful exposure to personnel.

CONCLUSION

This statement, Section III of FCC Form 301, and the attached exhibits were prepared by me or under my direct supervision and are believed to be true and correct.

It is submitted that the proposed operation described herein complies with the technical standards of the Rules and Regulations of the Commission.

DATED: May 16, 2005