

## **Exhibit 9**

**Antenna Description and Affidavit**

**Antenna Mounting and Spacing per Manufacturer's Specifications**

**Surveyor's Statement**

**RFR Measurements**

## Antenna Description and Affidavit

The antenna system installed is a Kathrein 759 12171 panel type antenna, described in the attached documentation, consisting of three levels of three panels each, face mounted on the sides of a uniform cross section, triangular, self supporting tower.

The panels are Kathrein type 754 154 for the upper and lower levels, and type 757 629 for the middle level (a rotated version of the 754154). A primary splitter provides an unequal power division to feed the three faces of the antenna, producing a directional pattern. Three secondary splitters provide equal power divisions to feed the panels on each face. Proper phasing of the driven elements is achieved through precision length cables.

In accordance with the antenna manufacturer's instructions, the antenna was side mounted on three sides of a triangular tower; the panels are mounted on azimuths of 60, 180, and 300 degrees true. The mounting brackets were designed to produce 1100 mm spacing between the back of the antenna panels and the array centerline, and the panels were spaced vertically 3000 mm on center, as required by the manufacturer.

Proper orientation of the antenna was confirmed by a licensed surveyor. The tower has no top mounted platform, and no other antennas are mounted within one wavelength, the distance specified by the antenna manufacturer as being necessary for proper directional operation.

I, Jon Banks, hereby declare as follows:

I am the project manager for the Sunlight Peak, Colorado, construction project. This project involves the construction of a communications site for three non-commercial educational radio stations, one of which, KDNK (ED-FM), is authorized to Carbondale Community Access Radio, Inc. ("CCAR") for service to the community of Carbondale, Colorado. CCAR, together with Colorado Public Radio and Roaring Fork Public Radio, have formed a limited liability company known as Sunlight Peak LLC (the "LLC"). The construction project at Sunlight Peak has been undertaken pursuant to and under the direction of the LLC on behalf of all three stations.

I hold FCC General Radiotelephone Operator License PG-4-6718, issued in 1984, and have worked as a broadcast engineer for thirty years. I have been employed as Chief Engineer or Director of Engineering for stations in New York City, Denver, Washington DC, and Aspen, Colorado, for companies such as Viacom and CBS. I am a member of the SBE and a former member of the Washington Executive Broadcast Engineers, and have served as broadcast frequency coordinator in the Washington DC market. I presented a paper at the 1989 NAB Convention, and have written for broadcast trade magazines.

I personally supervised the installation of the antenna elements, reflector screens, panels, mounting brackets, splitters, and cabling, and certify that all elements of the antenna were installed in accordance with the manufacturer's instructions.

Executed under penalty of perjury September 3, 2004.

  
Jon Banks



759 12171  
3x3 754 154 / 757 629  
88.1 MHz, 88.9 MHz & 90.5 MHz

Sunlight Peak LLC  
Glenwood Springs, CO  
SO# 71134 / PO# QBS04-04-025A

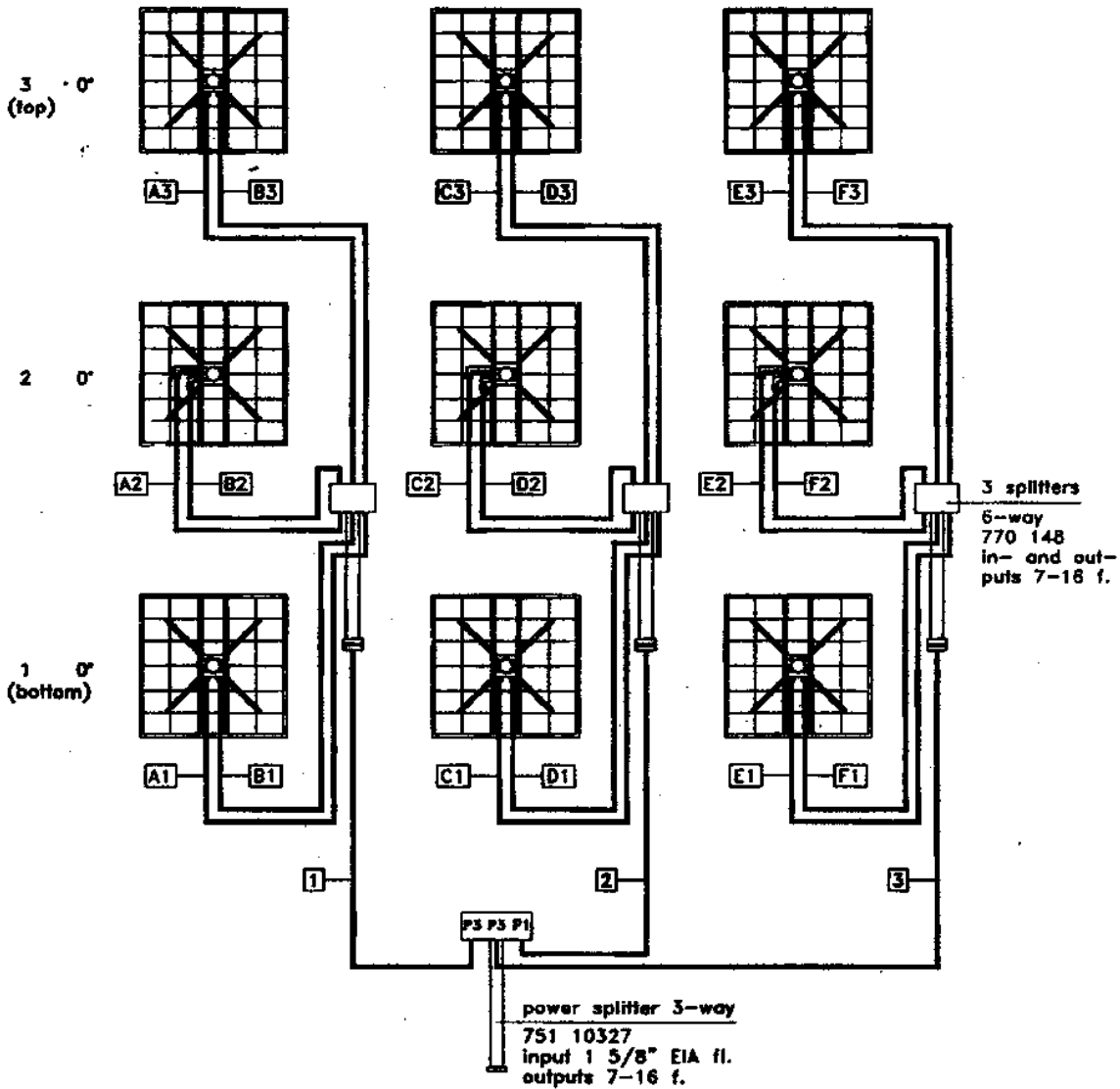
**Equipment List:**

- 6 ea 754 154 circular polarized FM panel antennas, 2 x 7-16 DIN female input connectors
- 3 ea 757 629 rotated 90° version of 754 154 panel antennas, 7-16 DIN female input connector
- 1 ea 751 10327 three-way main splitter, 45-16 mm tube design, 1-5/8" EIA flange input & 7-16 DIN female output connector, non-tunable, split ratio 3:3:1
- 3 ea 770 148 six-way sub splitters, 30-16 mm tube design, 7-16 DIN female connectors all ports (non-tunable)
- 8 ea 759 044 power divider mounting clamps
- 6 ea 092 930 elbows 7-16 DIN x 90°
- 3 ea LCF12-50J (914 590) bay feeder cables, 4 m long with 7-16 DIN male (092 1470) connectors installed each end
- 18 ea LCF12-50J (914 590) antenna feeder cables, nominal length 5 m, with 7-16 DIN male (092 1470) connectors installed each end

azimuth 60°  
 power split P3  
 bay phase 0°  
 (at 88.1 MHz)

180°  
 P1  
 0°

300°  
 P3  
 0°



panels seen from the rear



6 panels 754 154  
 2 inputs 7-16 f.



3 panels 757 629  
 2 inputs 7-16 f.  
 (rotated version of 754 154)

6 elbows 7-16 (092 930)

**KATHREIN**

Day  
 17.05.2004  
 Name  
 BCA-SI

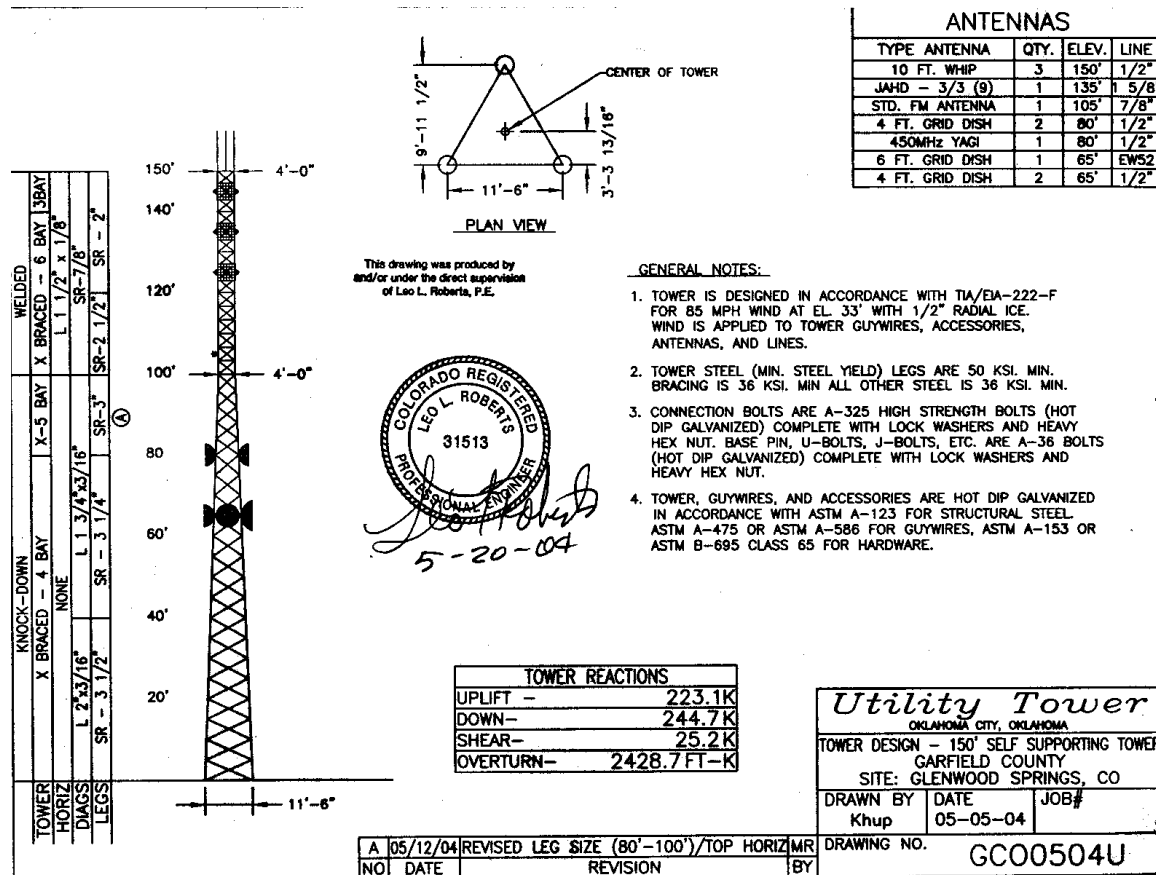
Cabling  
 FM System GLENWOOD SPRINGS

Type No.  
 75912171  
 Sheet: 115.1

## Antenna Mounting and Spacing per Manufacturer's Specifications

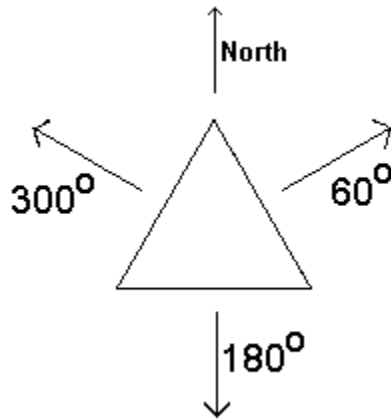
In order to fulfill the manufacturer's instructions for mounting the antenna with the correct bearing and spacing, special care was taken as follows:

The tower was specified with a triangular cross section with a uniform size above the 100 foot level, as shown below. This allowed the antenna to be mounted to a structure that did not taper or change in the antenna aperture, to simplify the antenna mounting brackets design.



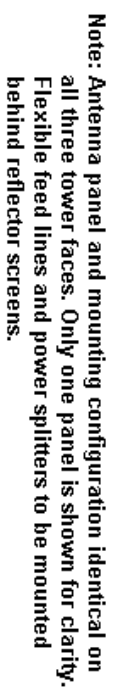
The manufacturer's instructions indicated that the faces of the panel antenna should be pointed at bearings of 60 degrees, 180 degrees, and 300 degrees true (equal spacings of 120 degrees). This would

be fulfilled automatically if the panels were face mounted on a triangular tower with the proper orientation as shown here:

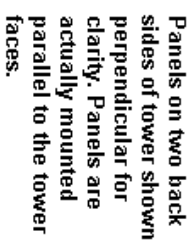


The manufacturer also specified that the panels had to be spaced equidistant from the centerline of the tower, so that the back of each panel was 1100 mm (43.307 inches) from that vertical axis. Brackets as specified and approved by the antenna manufacturer were used to fulfill that requirement. The attached drawing shows the details.

**TOP VIEW**



### SIDE VIEW



**Panels on two back sides of tower shown perpendicular for clarity. Panels are actually mounted parallel to the tower faces.**

## Kathrein 754-154 Circular Polarized Array

Sunlight Peak  
Glenwood Springs CO  
88.1, 88.9, 90.5 MHz

9/20/2004

The top fifty feet of the tower, and the antenna mounting brackets, were assembled on the ground before erection, allowing for extra care and precision in the installation of the brackets. At this time it was a simple matter to measure along the tower structure to verify that the antenna center line was at the licensed elevation above ground, and that the vertical spacing between the bays was 3000 mm, as specified. The following picture, taken after the installation was completed, clearly shows the uniform cross section of the top of the tower, the antenna panels in place, and the standoff from the tower face produced by the brackets.

Jon Banks  
9/20/04





## Surveyor's Statement



SCHMUESER | GORDON | MEYER  
ENGINEERS | SURVEYORS

GLENWOOD SPRINGS  
118 W. 5TH, SUITE 200  
GLENWOOD SPRINGS, CO 81601  
970-945-1004  
FX: 970-945-5948

ASPEN  
P.O. BOX 2155  
ASPEN, CO 81612  
970-925-6727  
FX: 970-925-4157

CRESTED BUTTE  
P.O. BOX 3088  
CRESTED BUTTE, CO 81224  
970-349-5355  
FX: 970-349-5358

I, KENNETH R. WILSON, certify that I am a registered land surveyor in the state of Colorado, license number P.L.S. 15710

On June 18, 2004, I surveyed the proposed new antenna site for KCJX, KVOV, and KDNK-FM and set witness points to allow the antenna to be properly oriented.

On August 4, 2004, I returned to the site and confirmed the orientation of the antenna. Based on the attached July 28 memo from Kathrein, the antenna is properly oriented with an error of less than one quarter of one degree.





**FACSIMILE**

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*Office Hours: 7:30am-5:00pm Pacific Time, Monday-Friday*

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TO:	<b>John Banks</b>	FROM:	<b>Mike Johnson</b>
ATTENTION:	<b>John</b>		
FAX NUMBER:	<b>970-947-9658</b>	DATE:	<b>7/28/04</b>

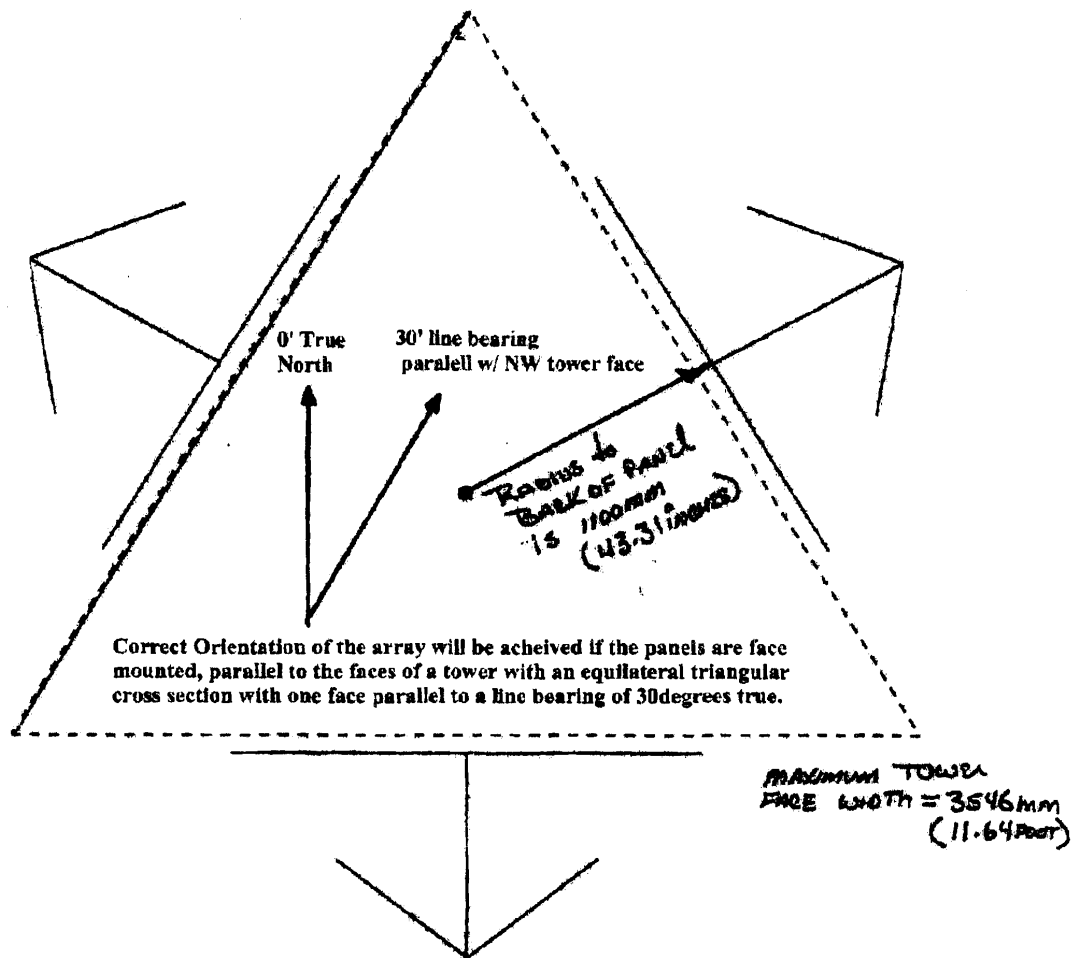
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Hello John,

I have attached a diagram of the detailed tower orientation we spoke about on the phone. Please take a look and let me know if this will suffice.

Best Regards,

  
**Mike Johnson**  
**Broadcast Sales**  
E-mail: [mjohnson@kathrein.com](mailto:mjohnson@kathrein.com)  
[www.kathrein-scala.com](http://www.kathrein-scala.com)



1 meter

mast size in mm 3546. direction 180.  
offset north 0. east 0.

Colorado Public Radio, Circular Polarization.

SCALA Medford Oregon	3 x 3 754 154 Panel array	Typ Nr.
HB		81.:

**NON-IONIZING ELECTROMAGNETIC RADIATION (NIE)  
MEASUREMENTS IN THE VICINITY OF THE  
KCJX-FM, KVOV-FM, KDNK-FM TOWER ON SUNLIGHT PEAK**

Prepared for Sunlight Peak LLC, Jon Banks Site Manager, by:

Myron Oliner

5401 E. Dakota Ave. #4  
Denver, CO 80246  
(303) 322-8990  
FAX: 303.780.9725

This report documents RFR measurements made in the area around the KCJX-FM, KVOV-FM, KDNK-FM tower site on Sunlight Peak near Glenwood Springs/Carbondale, CO at 39-25-08 N Lat and 107-22-10 W Long (NAD-27). The measurements detailed in this report were made September 2, 2004.

The purpose for this site analysis was to survey the area around the tower and building and measure RF levels to determine compliance with FCC Maximum Permissible Exposure standards.

There are two towers at this location. The distance between the towers is 325 feet. Stations operating at the Sunlight Peak LLC tower are:

KCJX-FM	88.9MHz	2Kw TPO	4Kw ERP
KVOV-FM	88.1MHz	0.6Kw TPO	1.2Kw ERP
KDNK-FM	90.5MHz	0.23Kw TPO	0.45Kw ERP

Stations operating at the other tower are:

KREG-TV	Ch 3	
KKCH-FM	92.7MHz	Mr. Banks verified that these stations were operating at their full-authorized power.

**Equipment...**

The equipment used to make the RFR measurements is a Wandel & Goltermann W&G EMR 300. Serial # BN2244/31 T-0008. FCC shaped probe Type 25 BN2244/90.62 Serial # B-0055. The probe is shaped to respond to Occupational/Controlled Exposure as described in FCC OET Bulletin 65. Last calibration for each device was September 2003.

A Narda SRM-3000 Serial #B-0075 with probe type 3501/01 Serial # B-0063 last calibrated June 2004 was used for selective radiation metering.

**Measurement Procedure and Results...**

The measurements were made with me facing each tower and holding the probe away from my body to place the probe at an angle of about 90° relative to the RF source.

The direct readings from the EMR 300 meter indicate maximum exposure in percent relative to the FCC exposure limits for Occupational/Controlled Exposure. These numbers were multiplied by 5 to obtain the maximum exposure in percent relative to the FCC exposure limits for General population/uncontrolled.

The transmission site is located at the top of Sunlight Peak between Glenwood Springs and Carbondale, Colorado. Access to the site is via a steep, rough, dirt road. There is an RFI warning sign on a gate approximately 100 yards from the LLC tower. There is another RFI warning sign posted on the structure in front of the tower.

There are two towers at this location. They are separated by about 325 feet. With no power feeding the LLC antenna, measurements were made around the KREG-TV/KKCH-FM tower. The highest readings found were South East of their tower and measured about 55% of MPE limits for General population. A location between the two towers was marked and measured while the LLC transmitters were off and while they were on. There was no difference in the measurement results and no interaction between the two tower locations.

With all of the LLC transmitters operating at their authorized power, the ambient RF measured around the tower was 0.5% of MPE limits for General population. The highest readings in the area of the LLC tower were in a direction North East of the tower. The readings as measured on the SRM-3000 meter were:

KCJX-FM	0.559%
KVOV-FM	0.146%
KDNK-FM	0.134%
KKCH-FM	3.140%
Others	0.322%
Total:	4.303% of MPE limits for General population/uncontrolled.

#### Conclusions ...

The RF levels around both towers, as measured with all transmitters operating at their full-authorized power, is below the MPE limits for the General population/uncontrolled.

#### Engineers Statement...

All representations contained herein are true to the best of my knowledge. I have worked in TV broadcasting for 33 years. I have been making RFR compliance measurements for 5 years. I hold a Bachelor of Science degree in Industrial Arts Electronics from Southern Colorado State College.



Myron Oliner  
September 2, 2004