RESOLUTION NO. 1902

A RESOLUTION OF THE GOLDEN CITY COUNCIL AUTHORIZING A FIVE YEAR CONTRACT WITH COLORADO STATE UNIVERSITY FOR "LOOKOUT MOUNTAIN RADIO FREQUENCY MEASUREMENTS"

WHEREAS, the City of Golden worked long and hard to prevent the installation of the new transmission tower on Lookout Mountain; and

WHEREAS, despite our best efforts, the United States Congress intervened and allowed construction; and

WHEREAS, the owners of the tower have made repeated assurances to Jefferson County and the public that radiation from the new tower would not exceed historical levels; and

WHEREAS, many of our residents are worried about increased radiation from the new tower; and

WHEREAS, City Council believes that independent, third party monitoring would be beneficial for all concerned and help the City protect its residents.

THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF GOLDEN, COLORADO:

Section 1. The Mayor is authorized to accept the attached proposal from Dr. Thomas E. Johnson with Colorado State University for "Lookout Mountain Radio Frequency Measurements.

Section 2. The Mayor is directed to bring all of Dr. Johnson's reports before City Council as they are completed.

Section 3. City Council intends to appropriate enough funds in its budget for every year of the project.

Adopted this 25th day of September, 2008.

Susan M. Brooks, MMC

City Clerk

Resolution No. 1902

Page 2

APPROVED AS TO FORM:

David S Williamson

City Attorney

I, Susan M. Brooks, City Clerk of the City of Golden, Colorado, do hereby certify that the foregoing is a true copy of a certain Resolution adopted by the City Council of the City of Golden, Colorado at a regular business meeting thereof held on the 25th day of September, A.D., 2008.

ATTEST:

Susan M. Brooks, City Clerk of the City of

Golden, Colorado



Sponsored Programs Fort Collins, CO 80523-2002 Phone: (970) 491-6355

Fax: (970) 491-6147

Proposal Transmittal Information

Date: August 21, 2008

To: Jacob Smith

Mayor of Golden 911 10th Street Golden CO 80401

Colorado State University submits an original proposal entitled "Lookout Mountain Radiofrequency Measurements." Dr. Thomas Johnson is CSU's Principal Investigator.

The Research Administrators assigned to this project are:

Chris Getzelman
Senior Research Administrator
Sponsored Programs, CSU
Fort Collins CO 80523-2002
Phone (970) 491-0439
Fax (970) 491-6147
chris.getzelman@colostate.edu

Linda Monum Research Administrator Sponsored Programs, CSU Fort Collins CO 80523-2002 Phone (970) 491-0974 Fax (970) 491-6147 linda.monum@colostate.edu

Please direct questions, correspondence or award documents to either of the above individuals.

Thank you.

Enc: proposal



Sponsored Programs Fort Collins, Colorado 80523-2002 (970) 491-6355 FAX: (970) 491-6147

August 21, 2008

Mayor Jacob Smith City of Golden 911 10th Street Golden, CO 80401

Dear Mayor Smith,

RE: "Lookout Mountain Radiofrequency Measurements."

Please note that the City of Golden has limited the reimbursement of costs of the enclosed proposal to be performed by Dr. Thomas E. Johnson, and thus did not provide adequate funds for the reimbursement of Facilities and Administrative (F&A) costs. This results in the State of Colorado and Colorado State University providing a financial subsidy to your organization. The value of the financial subsidy incurred in the conduct of this project is estimated to be \$8,406.

CSU values its relationship with your organization. However, unless you have an organizational policy published in the public domain that prohibits your organization from doing so, future projects will necessarily be expected to provide reimbursement of the full F&A and direct costs, i.e., total project costs.

Colorado State University's origin as a land grant institution, and thus our tri-part mission of education, research, and service, remains fundamental to our relationship with the public. The conduct of sponsored activities, e.g., externally-funded research, training, and/or service, is one of the primary mechanisms through which we fulfill our mission. As a public institution of higher education, standards of business practice and professional conduct are understandably high, frequently prescribed, and rigorously applied. Such is the case with the Facilities and Administrative Costs associated with sponsored activities.

F&A costs are costs that cannot be easily identified with a specific project but that are expended to meet the requirements of the project. Even in collaborative projects, these costs are real and incurred in the conduct of the project. They include a share of expenses for items such as operation and maintenance, library, depreciation or use allowance, sponsored projects administration, and departmental administration. The F&A rates are based on actual costs incurred and reported in CSU's financial statement. The rates are set by the U.S. Health and Human Services after a rigorous cost compilation, audit review, and negotiation process.

F&A recovery is a critical component of CSU's annual budget. Recovering less than the HHS-negotiated full, applicable rate represents a CSU subsidy of the sponsor's activity. State statute and federal cost principles are considered to limit a State public university from providing subsidy to an external entity. As such, institutional policy prescribes that the full, applicable F&A rate will be recovered by CSU unless the sponsor has a stated policy, published and in public dissemination, that defines the limit on the inclusion of F&A costs.

CSU continues to be a "best value" for conducting sponsored activity. Our HHS-negotiated F&A rates are significantly less than the rates of other types of contractors. Our costing is transparent to the sponsor and does not contain generic fees in addition to actual costs. The State of Colorado and University investment in CSU infrastructure provides access to cutting edge expertise and specialized equipment. Access to some of the Country's brightest student scholars is another institutional value.

CSU proposals and contracts that engage our faculty, staff, students, and institutional resources will include the full applicable HHS-negotiated F&A rate. We hope that the background information provided in this letter promotes increased understanding of this requirement and of the current HHS-negotiated F&A rates. Please feel free to distribute this information to appropriate individuals within your organization.

Thank you in advance for your cooperation.

Sincerely,

Linda Monum

Research Administrator

Office of Sponsored Programs

Colorado State University

Proposal for Making Radiofrequency General Area Measurements in the Vicinity of Lookout Mountain in Golden Colorado

This proposal is to perform general area measurements of radiofrequency radiation in the vicinity of Lookout Mountain in Golden Colorado. These measurements will be made on at least three separate occasions throughout the year. We will attempt to make the measurements at multiple locations previously identified as having high levels of radiofrequency exposure. After making the measurements, we will provide information on the locations and intensity levels measured, along with the time of the measurements, on maps of the area.

As measurements are made, comparisons to previous levels of radiofrequency radiation will be made and reported at least annually, and on an ad hoc basis in the interim.

Efforts will be made to ascertain the output power levels from the various broadcasting companies during the time frames when measurements are made. This may not be possible in all cases as the cooperation of multiple companies will be required.

Upon completion of the project, a final report summarizing any trends in output, average levels, and any other information collected will be submitted.

BUDGET JUSTIFICATION

Personnel

Johnson, Thomas E., Ph.D., Assistant Professor, P.I., 0.5 calendar months (.04%) time and effort requested for years 1 through 5, will oversee the student and all aspects of the project, including supervision of the student measurements and compilation of data into reports. Dr. Johnson will be responsible for the budgetary aspects of the project.

TBN, Student Hourly, 1 calendar month (10%) effort for years 1 through 5, will work directly under the supervision of a Health Physics Faculty member at CSU. He/she will make measurements and prepare reports.

Fringe benefits are assessed at the rates of 24.4%, 24.4%, 25.8%, 26.3% and 26.8% consecutively for Years 1 through 5 for the PI, and 0.80%, 1.00%, 1.01%, 1.51% and 2.01% for the Student Hourly.

Personnel - Year 01 (\$ 2,155)

Personnel - Year 02 (\$ 2,245)

Personnel - Year 03 (\$ 2,337)

Personnel - Year 04 (\$ 2,441)

Personnel - Year 05 (\$ 2,552)

Total Personnel

\$ 11,730

Domestic Travel

Travel to Golden Colorado to perform radiofrequency measurements. Three trips Mileage to Golden CO (75 miles one way each trip)

Domestic Travel - Year 01 (\$ 239)

Domestic Travel - Year 02 (\$ 249)

Domestic Travel - Year 03 (\$ 259)

Domestic Travel - Year 04 (\$ 269)

Domestic Travel - Year 05 (\$ 280)

Total Domestic Travel

\$ 1,296

Software programs: Adobe Acrobat Professional in Year 1, Annual renewal of software package in Years 2 through 5: Miscellaneous supplies for storing data, CD's; recording notes, notebooks; ArcView Software and dongle; GPS logging device (Year 1 only, Garmin 60Cx or equivalent).

Materials & Supplies - Year 01 (\$ 725)

Materials & Supplies - Year 02 (\$ 364)

Materials & Supplies - Year 03 (\$ 378)

Materials & Supplies - Year 04 (\$ 393)

Materials & Supplies - Year 05 (\$ 409)

Total Materials & Supplies

\$ 2.269

Consultant

Riggs, Philip D., Ph.D. will function as a Geographic Information System (GIS) consultant, helping to integrate radiofrequency field readings, and local maps. He will assist in creating methods of presenting the material that are meaningful and easy to interpret with ArcView and other software..

Consultant - Year 01 (\$ 500)

Consultant - Year 02 (\$ 500)

Consultant - Year 03 (\$ 500)

Consultant - Year 04 (\$ 500)

Consultant - Year 05 (\$ 500)

Total Consultant

\$ 2,500

Other Direct Cost

Annual calibration of radiofrequency measuring equipment.

Other Direct Cost - Year 01 (\$ 1,200)

Other Direct Cost - Year 02 (\$ 1,248)

Other Direct Cost - Year 03 (\$ 1,298)

Other Direct Cost - Year 04 (\$ 1,350)

Other Direct Cost - Year 05 (\$ 1,404)

Total Other Direct Cost	\$ 6,500
Total Direct Cost	\$ 24,295
Total Project	\$ 24,295



Sponsored Programs

Fort Collins, Colorado 80523-2002 (970) 491-6355 FAX: (970) 491-6147

To: Susan M. Brooks

City of Golden 911 10th Street Golden CO 80401

Date: December 4, 2008

Re: Agreement for Professional Services for project entitled "Lookout Mountain Radiofrequency

Measurements", Dr. Thomas Johnson is CSU's Principle Investigator

(please reference in any correspondence)

Enclosed is __1_ copy of the referenced document which has been signed on behalf of Colorado State University.

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_X__ We have retained a fully executed copy for our files.

SPECIAL COMMENTS:

Please direct any inquiries regarding the above referenced document to:

Ms. Betty Eckert Associate Director of Sponsored Programs Colorado State University Sponsored Programs 2002 Campus Delivery Fort Collins CO 80523-2002 (970) 491-1554

Fax: (970) 491-6147

betty.eckert@colostate.edu

Ms. Chris Getzelman Senior Research Administrator Colorado State University Sponsored Programs 2002 Campus Delivery Fort Collins CO 80523-2002 (970) 491-0439

Fax: (970) 491-6147

chris.getzelman@colostate.edu

AGREEMENT FOR PROFESSIONAL SERVICES

THIS AGREEMENT is made and entered into the \mathcal{L} day of \mathcal{L} day of \mathcal{L} and between THE CITY OF GOLDEN (hereinafter referred to as "GOLDEN") and Board of Governors of the Colorado State University System acting by and through Colorado State University on behalf of Dr. Thomas E. Johnson (hereinafter referred to as "CONTRACTOR").

WITNESSETH:

WHEREAS, GOLDEN requires professional services to perform general area measurements and monitoring of radiofrequency radiation in the vicinity of Lookout Mountain in Golden, Colorado;

WHEREAS, CONTRACTOR has represented to GOLDEN that it has the requisite expertise and experience to perform the required work.

THEREFORE, for and in consideration of the promises and covenants herein, the parties agree as follows:

I. SCOPE OF SERVICES.

CONTRACTOR agrees to provide periodic (approximately equally distributed throughout the year) measuring and analyzing of radiofrequency radiation (at estimated times of higher radiation levels) in the vicinity of Lookout Mountain in Golden, Colorado as set forth in its proposal, which proposal is attached hereto and made a part of this Agreement (Exhibit A). All "reports" generated by CONTRACTOR pursuant to this Agreement shall be directed to the Golden City Manager and will include an analysis and explanation of the reported data.

CONTRACTOR'S initial survey (Phase 1) of Lookout Mountain and the surrounding areas in Golden, Colorado, will address appropriate locations for making future measurements of radiofrequency radiation. Upon determining the most appropriate locations, CONTRACTOR shall make recommendations for Phase 2 of its work in a report to the City Manager regarding the proposed monitoring locations and provide a more detailed schedule and plan for the measuring and monitoring project. This initial report shall be delivered to the City Manager no later than 90 days after approval of this Agreement. Furthermore, the initial report shall include a summary of impacts of the radiofrequency radiation on human health and instrumentation noted in current literature. The City Manager will thereafter advise CONTRACTOR of suggested modifications to the proposed locations.

In the event of a conflict between Exhibit A and this Agreement, the provisions of this Agreement shall prevail.

II. GOLDEN OBLIGATIONS/CONFIDENTIALITY.

GOLDEN shall provide CONTRACTOR with data, information, reports and such other documentation as may be available to GOLDEN, and reasonably required by CONTRACTOR to perform services under this Agreement ("Confidential Information"). No Confidential Information shall, unless as required by law, be disclosed by CONTRACTOR to third parties without prior written consent of GOLDEN. All documents provided by GOLDEN to CONTRACTOR shall be returned to GOLDEN. CONTRACTOR is authorized by GOLDEN to retain copies of such data and materials at CONTRACTOR'S expense.

CONTRACTOR agrees to provide all other supplies necessary to carry out the services described in Section I.

III. OWNERSHIP OF WORK PRODUCT.

Upon payment to CONTRACTOR pursuant to this Agreement, all work, data, reports, graphs, charts, computer programs (nonproprietary), computer input and output, maps, surveys, or any and all other materials, including electronic files, developed for this Agreement, are and shall be the sole and exclusive property of GOLDEN. However, any reuse of the documents by GOLDEN without prior written authorization by CONTRACTOR other than for the specific intended purpose of this Agreement will be at GOLDEN's sole risk. Nothing in this Agreement will prevent CONTRACTOR from retaining copies of documents for the lawful use in its own business purposes. CONTRACTOR will provide GOLDEN with a ten (10) day written notice prior to disposal of documents it has retained, during which time GOLDEN may take physical possession of same at the storage site.

IV. COMPENSATION.

In consideration of the completion of the services specified herein by CONTRACTOR, GOLDEN shall pay CONTRACTOR an amount of \$24,295.00, which amount shall be payable in annual increments as set forth below, based upon the "Budget Justification" provisions of Exhibit A, attached hereto.

CONTRACTOR shall submit annual invoices to GOLDEN, which invoices shall be due and payable thirty (30) days after receipt. Upon execution of this Agreement, CONTRACTOR shall submit to GOLDEN the first annual invoice in the amount of \$4,819.00, based upon the total costs for "Year 01" set forth in the "Budget Justification" in Exhibit A. All subsequent annual invoices shall be submitted on or around January 1st of each year this Agreement is in effect.

V. COMMENCEMENT OF WORK.

CONTRACTOR shall, upon the parties' execution of the Agreement or upon CONTRACTOR's receipt of GOLDEN's first annual payment, whichever is last, commence work on all of its obligations in accordance with the Scope of Services.

VI. CHANGES IN SCOPE OF SERVICES.

A change in the Scope of Services shall constitute any change or amendment of services or work that is different from or additional to that specified in the Scope of Services. No such change, including any additional compensation, shall be effective, or paid unless authorized by written amendment executed by GOLDEN. If CONTRACTOR proceeds without such written authorization, then CONTRACTOR shall be deemed to have waived any claim for additional compensation, including any claims based on the theory of unjust enrichment, quantum merit or implied contract. Except as expressly provided herein, no agent, employee or representative of GOLDEN shall have the authority to enter into any changes or modifications, either directly or implied by a course of action, relating to the terms and scope of this Agreement.

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VII. PROFESSIONAL RESPONSIBILITY.

CONTRACTOR hereby warrants that it is qualified to assume the responsibilities and render the services described herein and has all requisite corporate authority and professional licenses in good standing, required by law.

The work performed by CONTRACTOR shall be timely performed in accordance with generally accepted professional practices and the level of competency presently maintained by other practicing professionals in the same or similar type of work in the applicable community.

VIII. COMPLIANCE WITH LAW.

The work and services to be performed by CONTRACTOR hereunder shall be done in compliance with all applicable federal, state, county and local laws, ordinances, rules and regulations.

IX. APPROPRIATION.

- A. The obligations of GOLDEN hereunder shall not constitute an indebtedness of GOLDEN within the meaning of any constitutional or statutory limitation or provision. The fiscal obligations of GOLDEN under this Agreement are subject to annual appropriations by the City of Golden City Council, and shall be from year to year only and shall not constitute a mandatory payment obligation of GOLDEN in any fiscal year beyond the present fiscal year. This Agreement shall not directly or indirectly obligate GOLDEN to make any payments beyond those appropriated for any fiscal year in which this Agreement shall be in effect. The decision as to whether to appropriate such amounts shall be at the sole discretion of the City of Golden City Council.
- B. In the event that GOLDEN does not appropriate sufficient funds or does not have funds available for any payment herein at any time, GOLDEN shall provide written notice to CONTRACTOR that payment or payments will not be made. The failure to appropriate funds or have funds available shall not be a breach of this Agreement.

X. NON-ASSIGNABILITY.

Neither this Agreement, nor any of the rights or obligations of the parties hereto, shall be assigned by either party without the written consent of the other.

XI. TERMINATION.

This Agreement shall terminate at such time as the work in the Scope of Services is completed, or no later than December 31, 2013, or upon GOLDEN providing CONTRACTOR with seven (7) days advance written notice, whichever occurs first. In the event the Agreement is terminated by GOLDEN through issuance of a written notice of intent to terminate, GOLDEN shall pay CONTRACTOR on a pro rata basis for all work previously authorized and satisfactorily completed as determined by GOLDEN prior to the date of termination. If, however, CONTRACTOR has substantially or materially breached the standards and terms of this Agreement, GOLDEN shall have any remedy or right of set-off available at law and equity.

XII. VENUE.

This Agreement shall be governed by the laws of the State of Colorado, and any legal action concerning the provisions hereof shall be brought in the County of Jefferson, State of Colorado.

XIII. INDEPENDENT CONTRACTOR.

CONTRACTOR is an independent contractor. Notwithstanding any provision appearing in this Agreement, all personnel assigned by CONTRACTOR to perform work under the terms of this Agreement shall be, and remain at all times, employees or agent of CONTRACTOR for all purposes. CONTRACTOR shall make no representation that it is the employee, officer or official of GOLDEN for any purposes.

XIV. NO WAIVER.

Delays in enforcement or the waiver of any one or more defaults or breaches of this Agreement by GOLDEN shall not constitute a waiver of any of the other terms or obligations of this Agreement.

XV. ENTIRE AGREEMENT.

This Agreement and the attached Exhibit constitute the entire Agreement between CONTRACTOR and GOLDEN, superseding all prior oral or written communications. None of the provisions of this Agreement may be amended, modified or changed, except as specified herein.

XVI. NOTICE.

Any notice or communication between CONTRACTOR and GOLDEN which may be required, or which may be given, under the terms of this Agreement shall be in writing, and shall be deemed to have been sufficiently given when personally presented or sent pre-paid, first class United States Mail, addressed as follows:

GOLDEN City of Golden Attn: City Manager 911 10th St. Golden, CO 80401 CONTRACTOR
Christine Getzelman
Sr. Res. Admin.
Colorado State University
Sponsored Programs
601 South Howes Street
408 University Services Center
Fort Collins, CO 80523-2002

XVII. IMMIGRATION STATUS OBLIGATIONS

All employees are Colorado State

A. CONTRACTOR certifies, through signature of its authorized representative executing this Agreement, that it does not knowingly employ or contract with an illegal alien who will perform work under the public contract for services and that the CONTRACTOR will participate in the United States Government's E-Verify Program or the State of Colorado Department of Labor and Employment Program ("Department Program") in order to confirm the employment eligibility of all employees who are newly hired for employment to perform work under the public contract for services.

B. CONTRACTOR shall not:

- 1. Knowingly employ or contract with an illegal alien to perform work under this Agreement; or
- 2. Enter into a contract with a subcontractor that fails to certify to the CONTRACTOR that the subcontractor shall not knowingly employ or contract with an illegal alien to perform work under the public contract for services.
- C. CONTRACTOR shall affirm as required by C.R.S. § 8-17.5-102 (c) (II) the employment eligibility of all employees who are newly hired for employment to perform work under the public contract for services through participation in either the E-Verify Program or the Department Program.
- D. CONTRACTOR is prohibited from using the E-Verify Program or Department Program procedures to undertake pre-employment screening of job applicants while the public contract for services is being performed.

- E. If CONTRACTOR obtains actual knowledge that a subcontractor performing work under the public contract for services knowingly employs or contracts with an illegal alien, CONTRACTOR shall be required to:
- 1. Notify the subcontractor and GOLDEN within three days that the CONTRACTOR has actual knowledge that the subcontractor is employing or contracting with an illegal alien; and
- 2. Terminate the subcontract with the subcontractor if within three days of receiving the notice required pursuant to sub-subparagraph (B)(2) the subcontractor does not stop employing or contracting with the illegal alien; except that the CONTRACTOR shall not terminate the contract with the subcontractor if during such three days the subcontractor provides information to establish that the subcontractor has not knowingly employed or contracted with an illegal alien.
- F. CONTRACTOR shall comply with all rules and regulations and any reasonable request by the State Department of Labor and Employment made in the course of the Department's performance of its lawful duties pursuant to C.R.S. 8-17.5-101 et. seq., as amended from time to time.
- G. If CONTRACTOR violates any of the provisions set forth in this section, GOLDEN may terminate the Agreement and CONTRACTOR shall be liable for all actual and consequential damages incurred by GOLDEN.

CITY OF GOLDEN, COLORADO

Jacob Smith

Mayor

Susan M. Brooks, MMC

City Clerk

CONTRACTOR

City of Golden Memorandum



To:

City Council

Thru:

Michael C. Bestor, City Manager

From:

Steve Glueck, Director of Planning and Development

Date:

June 5, 2009

Re:

Initial CSU Report on Lookout Mountain Radiofrequency Measurements

Attached please find the report from Professor T.E. Johnson, PHD from Colorado State University containing information on three sets of initial measurements at 21 locations in the vicinity of the Lookout Mountain Towers. As indicated to Council on May 28, 2009 these initial measurements are primarily intended to provide baseline information for comparison as digital broadcasts increase and analog broadcasting is eliminated.

Staff will forward further information as it is available.

City of Golden Interim report on Radiofrequency Field Measurements on Lookout Mountain 01JUN09

From: T.E. Johnson, PhD

Assistant Professor

Department of Environmental and Radiological Health Sciences

Preliminary Site Selection

Twenty one sites were selected to measure and characterize the radiofrequency (RF) fields originating from antennas located on Lookout Mountain. These locations were selected based on there proximity to the antennas; RF measurements reported in the study "Human Responses to Residential RF Exposure" conducted by John S. Reif D.V.M; and by visiting the site. Table 1 below provides a summary of these preliminary locations.

Table 1 - Selected RF measurement locations in the vicinity of Lookout Mountain.

ID No.	Address	Long	Lat
1	792 Aspen Rd, Golden, CO 80401-9439	39.72770	105.23856
2	21579 Cabrini Blvd, Golden, CO 80401-9406	39.71013	105.24252
3	21139 Cedar Lake Rd, Golden, CO 80401-9493	39.72839	105.23838
4	475 Colorow Rd, Golden, CO 80401-9554	39.72231	105.25116
5	721 Colorow Rd, Golden, Colorado 80401	39.72916	105.25083
6	1054 Colorow Rd, Golden, CO 80401-9510	39.72893	105.24303
7	541 Columbine Ave, Golden, CO 80401-8842	39.72479	105.24439
8	848 Golden Point Dr, Golden, CO 80401-9501	39.72992	105.25383
9	21589 Grandview Ave, Golden, CO 80401-9421	39.72162	105.24186
10	21969 Grandview Ave, Golden, CO 80401-8816	39.72206	105.24727
11	22363 Hillcrest Cir, Golden, CO 80401-9423	39.71461	105.25210
12	634 Larkspur Dr, Golden, CO 80401	39.72511	105.24636
13	44 Lookout Mountain Cir, Golden, CO 80401	39.71537	105.25236
14	21532 Main Ave, Golden, CO 80401-9429	39.72210	105.24158
15	21508 Mountsfield Dr, Golden, CO 80401-9432	39.72116	105.24283
16	21547 Mountsfield Dr, Golden, CO 80401-9431	39.72007	105.24287
17	123 Paradise Rd, Golden, CO 80401-8836	39.71461	105.25008
18	Aspen ,30 Rd, Golden, Colorado 80401	39.72730	105.23565
19	21153 Sky Meadow Ln, Golden, CO 80401-8807	39.72379	105.23764
20	21093 Sky Meadow Ln, Golden, CO 80401-8826	39.72457	105.23788
21	20554, 20704 Sky Meadow Ln, Golden, CO 80401-8811	39.72292	105.23305

Measurements

Preliminary measurements were performed on February 10, 2009 (data 1) and April 8, 2009 (data 2) prior to the cessation of analog broadcasting by the various transmitting companies. Measurements were performed again on May 14, 2009 (data 3) after KMGH channel 7, KUSA channel 9, and KTVD channel 20 had changed to digital broadcasting and ceased broadcasting analog signals. These measurements were made with an Electromagnetic Radiation Meter (EMR-300), S/N BN2244/31 and an electric field probe (E-Field) type 18, model 2244/90.72. The EMR-300 and the E-Field probe were calibrated on January 19, 2009 by Liberty Labs, Inc. All measurements were performed in accordance with guidelines described in ANSI/IEEE C95.1-2005, Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz. See Table 2 and Graph 1 below for RF measurements.

Measurement Frequency

We recommend collecting data on a semiannual basis or when a significant change in the effective radiated power (ERP) output from Lookout Mountain antennas occurs.

Tower Output

Currently we are investigating the Effective Radiated Power of each tower and plan to have this data by August 2009.

Results to Date

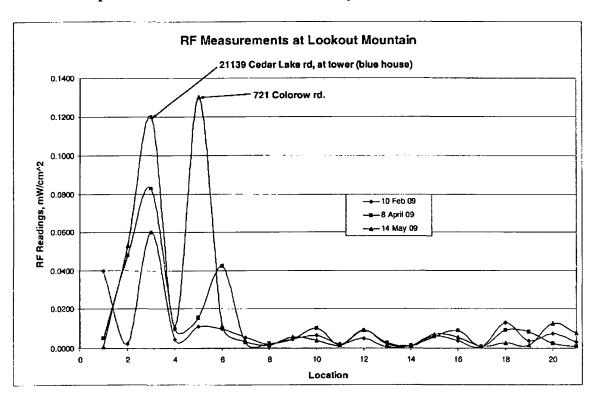
Measurements taken thus far are summarized in Table 2 and Graph 1.

Table 2 – RF Measurements Collected in the vicinity of Lookout Mountain

ID No.	Data 1 mW/cm ²	Data 2 mW/cm ²	Data 3 mW/cm²
1	0.0400	0.0053	0.0008
2	0.0025	0.0480	0.0530
3	0.0600	0.0830	0.1200
4	0.0047	0.0098	0.0110
5	0.0110	0.0155	0.1300
6	0.0100	0.0423	0.0114
7	0.0056	0.0031	0.0033
8	0.0021	0.0024	0.0017

9	0.0048	0.0046	0.0059
10	0.0066	0.0101	0.0040
11	0.0021	0.0014	0.0015
12	0.0051	0.0089	0.0093
13	0.0007	0.0029	0.0022
14	0.0013	0.0011	0.0013
15	0.0061	0.0060	0.0072
16	0.0038	0.0090	0.0055
17	0.0005	0.0008	0.0009
18	0.0130	0.0094	0.0029
19	0.0037	0.0084	0.0016
20	0.0074	0.0024	0.0126
21	0.0031	0.0008	0.0076

Graph 1 - RF Measurements in the vicinity of Lookout Mountain



Statistical Analysis

Preliminary statistical analysis has been performed using paired t-tests. These results show that the P-value is greater than the significance level of 0.05. So we fail to reject the null hypothesis that there's no difference between the means of each data set. More data is needed in order to draw any conclusion regarding data trends. Once the switch to all

digital broadcasts is completed on June 12, 2009, daily variation in signal strengths will need to be accounted for in the statistical analysis. Tables 3 summarize the statistical results, thus far.

. Table 3 - Paired t- test for Data sets 1, 2, and 3.

Data 1 and Data 2	Variable 1	Variable 2
Mean	0.009243	0.013105
Variance	0.000204	0.000413
Observations	21	21
Pearson Correlation	0.656819	
Hypothesized Mean Difference	0	
df	20	
t Stat	-1.153155	
P(T<=t) one-tail	0.131221	1
t Critical one-tail	1.724718	ł
P(T<=t) two-tail	0.262443	
t Critical two-tail	2.085963	

Data 2 and Data 3	Variable 1	Variable 2
Mean	0.013105	0.018748
Variance	0.000413	0.001372
Observations	21	21
Pearson Correlation	0.684268	
Hypothesized Mean Difference	0	
df	20	
t Stat	-0.940953	
P(T<=t) one-tail	0.178978	
t Critical one-tail	1.724718	
P(T<=t) two-tail	0.357956	ļ
t Critical two-tail	2.085963	

Data 1 and Data 3	Variable 1	Variable 2
Mean	0.009243	0.018748
Variance	0.000204	0.001372
Observations	21	21
Pearson Correlation	0.535883	
Hypothesized Mean Difference	0	
df	20	
t Stat	-1.371077	
P(T<=t) one-tail	0.09277	
t Critical one-tail	1.724718	
P(T<=t) two-tail	0.185541	
t Critical two-tail	2.085963	

Impact of RF on Human Health

Presently, we are conducting a literature review of RF biological effects studies listed in IEEE Std C95.1 – 2005, Annex B. Based on our preliminary review of the literature; the maximum permissible exposure value for the general public listed in IEEE Std C95.1-2005, and our preliminary measurements listed in Table 2 there is not a significant RF exposure to the general public. No untoward health effects are anticipated or expected based on these preliminary data.

Mapping and Software

We are currently working on plotting the RF site locations on to maps using ArcView GIS software and will be investigating the possibility of kriging the data to produce contour lines.