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**PETITION TO THE CHAPEL HILL TOWN COUNCIL FROM WCOM
COMMUNITY RADIO**

May 10, 2004

Dear Mayor and Town Council:

WCOM Community Radio requests that you consider directing Town staff to amend the Administrative Policy on Telecommunication Towers to include a provision for low power community radio stations, a technology that did not exist when the Town Council accepted the Policy in 1999. Our request fits within the last paragraph of that Policy, which states the Council can direct new approaches to facility location as new technologies develop.

It is particularly urgent that you consider this request now, because of the opportunity for a new community radio station that will be lost without your action. WCOM Community Radio's FCC license expires on June 30, 2004. This license is an extremely valuable community asset, the only low power FM (LPFM) license issued for the Durham-Chapel Hill area. It may well be the only new opportunity the community will have to counterbalance the effects of media centralization, and provide an alternative source for local music and public affairs.

We apologize for bringing you a request that needs such quick action. Until last Friday, we understood that the FCC would grant us a "minor amendment" to allow us to broadcast from Culbreth School. Toward that end, we had secured permission from the School Board to mount WCOM's antenna on a light pole at Culbreth School, in keeping with the existing Town Policy to locate new antennas on existing facilities. However, on Friday the FCC denied our request to move to the Culbreth site, based on the interference it would cause to a station in Danville Virginia. [Realistically a 100-watt station in Chapel Hill poses no threat to a station in Danville; the FCC's decision only highlights the extreme restrictions place on LPFM by Congress.]

In the process of denying WCOM's application for the Culbreth site, the FCC did provide more specific information about where it would allow WCOM's antenna--a band between 15-501 and Smith Level road encompassing the southern part of Southern Village and Dogwood acres. Unfortunately, there are no broadcast locations within that area that would qualify under the current Administrative Policy on Telecommunication Towers, or that have the appropriate zoning to apply for a Special Use Permit.

Factors to consider about low power radio as a new technology

There are two important aspects of low power radio that makes it different from the technologies considered at the time the current Policy was formulated. The first is that low power radio is very limited as to the locations from which it can broadcast. Due to its small (approximately five-mile broadcast range), LPFM transmitters can only be located within the community that they serve, unlike full power stations that can broadcast from

Please turn over

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further away and still reach their audience. Moreover, due to the low priority given to LPFM stations by the FCC, they must fit within gaps in the contours of existing stations. Given these restrictions, it is difficult for a LPFM station to meet the existing Town Policy that requires antennas to be attached to existing facilities, as there may be no existing facilities in the limited area permitted by the FCC.

A second factor for the Council to consider is that LPFM transmission equipment is extremely small—it is not really comparable to the scale of full power radio, TV, or cell phone facilities. A typical 100-watt FM antenna is a circular ring 12” in diameter; when it is up in the air, it is virtually invisible. The tower or pole needed to house the antenna is a thin, lightweight model. Moreover, the FCC limits the maximum height of a LPFM antenna to 98 feet above ground, a height that doesn’t require lighting at night. Given its small size and limited height, it’s possible to locate LPFM in places where other broadcast facilities might not be appropriate.

[One example of a LPFM transmission facility envisioned by WCOM is an installation in the yard of a supportive resident on Smith Level Road. In this location, the tower would be almost completely obscured by trees except for the last few feet. The attached photo shows a three-foot diameter balloon (much larger than a LPFM antenna) attached to 98-foot string to give an example of the visual impact.]

Timeline

Once again, we apologize for the urgency of our request. In order to meet the conditions of our FCC license, we need to identify the transmitter site by the end of May, which will leave time to file for the FCC minor amendment (a three week process when expedited), in order to begin broadcasting by June 30.

We very much appreciate the Town Council’s support in enabling our community to take advantage of a unique opportunity to access the public airwaves.

Thank-you for your consideration of this request

Sincerely,

Ruffin Slater
WCOM Community Radio 103.5

About WCOM Community Radio

WCOM Community Radio is very close to bringing a new community radio station to Chapel Hill and Carrboro. The FCC has granted a license to broadcast at 100 watts at 104.5 FM; the Federal Government has provided a \$33,000 grant to purchase equipment; WCOM has secured studio space; and has scores of willing volunteers and hundreds of potential listeners. The last step in bringing a new community radio station to Chapel Hill and Carrboro is to find a location for the transmission antenna.

Background

In 2000, the FCC created a new class of low-power FM (LPFM) community service radio stations. The idea behind low-power FM stations is that they are small enough (5 mile broadcast area) to fit between the frequencies of existing full-power stations, and their licenses are granted to noncommercial organizations for educational purposes. LPFM is intended to counterbalance the concentration of radio station ownership as a result of deregulation. "When hundreds of stations are owned by just one person or company," then FCC Chairman William Kennard said in March 2000, "service to local communities and coverage of local issues loses out." WCOM will be a resource for local public affairs and music programming. As the only LPFM license granted for the Chapel Hill-Durham area, WCOM constitutes a valuable community asset.

In addition to a license from the FCC, WCOM has also received a \$33,000 grant from the US Government's Public Telecommunications Facilities Program for 75% of the station's equipment costs. 15 local non-profit and government organizations supported the grant application (including Congressman Price) and 1,000 citizens signed a petition in support. Weaver Street Market has provided space in downtown Carrboro for the WCOM studio.

Broadcast Location

WCOM is permitted by the FCC to broadcast from a location within two kilometers of particular geographic coordinates, as long as it doesn't interfere with the contours of existing stations. This translates into permission to broadcast from a zone up to two kilometers away and to the southwest of the Southern Village Apartments.

Timeline

The FCC license requires that WCOM commence broadcasting by June 30, 2004. Once the final antenna location is determined, it's necessary to ask the FCC for a minor modification to the FCC permit in order to broadcast from that location. It is important to request this minor modification as soon as possible in order to receive approval before June 30. The timeline makes it necessary to obtain permission for the antenna location as soon as possible.

Programming

WCOM will fill a need for community-oriented programming with a mixture of locally produced public affairs and music programming, as well as nationally-distributed

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programming that would be brought to our audience for the first time. WCOM will broadcast in both English and Spanish. We will have regular slots reserved for community access shows and citizen commentaries, and an extensive events calendar.

Our music programming will be a mix of different types of music. The music schedule will be divided into two-hour shows, each one reflecting the tastes of the volunteer programmer. In addition, we have volunteer programmers interested in broadcasting Radio Theater.

We plan to refine our programming through public forums and listener surveys. Our Station Manager and our programming committee will decide upon our final programming.

Opportunity for volunteers

Volunteers will staff WCOM. It's an opportunity for local residents to learn and participate in radio broadcasting. There are many successful community radio stations across the country that rely on volunteers. These stations serve an important educational and community-building function in their communities.

Regulation

WCOM will be a non-commercial radio station regulated by the FCC just like WUNC. WCOM is subject to federal laws that prohibit broadcasting obscene or indecent programming.

Ownership

WCOM is a project of the Public Gallery of Carrboro, a seven year-old 501(c)(3) non-profit organization established to provide public access to the arts and to involve citizens in their community.

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From: Ruffin Slater [Ruffin@weaverstreetmarket.coop]
Sent: Friday, May 14, 2004 2:03 PM
To: Judy Johnson; JB Culpepper
Subject: WCOM petition



PETITION TO THE
CHAPEL HILL TO...

Hi Judy -

This e-mail is in response to your phone message this morning asking about which antenna location WCOM petitioned for.

I've attached a copy of the petition for your reference. In the petition, we requested consideration of low power FM as a new technology that may require a new approach to siting facilities, due to its constrained broadcasting range and the small size of the equipment.

In the petition, we mention the Smith Level Road site as one potential site that would work for WCOM, since it fits within the broadcasting area allowed by the FCC, and we have landowner permission to use it.

We also have landowner permission to use the roof of Weaver Street Market at 716 Market Street in Southern Village, which also fits within the area allowed by the FCC. That building is 40 ft tall, so at that location we could use a 40 ft tower or pole with an 18 foot mast.

WCOM would be very happy to obtain approval to broadcast from either location, and would be very happy to submit more information about the Southern Village option if you believe that is a preferable site.

I hope this answers your question. Please let me know what other information I can provide.

Thanks,

Ruffin

Ruffin Slater
General Manager
Weaver Street Market
101 East Weaver Street
Carrboro NC 27510
919-929-0010
919-942-4889 (fax)
ruffin@weaverstreetmarket.coop

May 13, 2004

(10)

Judy Johnson
Senior Planner, Town of Chapel Hill

Dear Ms. Johnson:

Thank you for considering WCOM's petition regarding our antenna site. The purpose of this letter is to provide you with background about our goals in locating the antenna, and information about the proposed Smith Level Road location and the equipment involved.

1. WCOM's first goal is to have an antenna located within the particular geographic area permitted by the FCC. This area is indicated in the attached map.
2. WCOM's second goal is to have the antenna achieve its functional broadcasting purpose. This involves receiving the signal from the studio, and then broadcasting it to listeners. We are in the process of engineering studies for the potential Smith Level Road site. In general, both receiving and transmitting can be accomplished by having the antennas above the tree line, which is important because receiving the signal requires a line-of-sight from the studio, and transmitting the signal requires that it not be absorbed by leaves from nearby trees.
3. WCOM's third goal is to have an antenna structure with as small a visual impact as possible. We believe this can be done by setting-back the tower from the property lines, and by constructing it so that the trees would screen it. We are proposing an eighty-foot tower, which is within the 83-foot tree line, with an 18 foot mast that is two inches in diameter, which would extend above the trees. Since the antennas themselves are small and lightweight, and since the angle of sight would obscure the mast and antennas from many vantage points, we believe the entire assembly would be barely visible. Attached is a sight plan and elevation drawing to provide specific information about the tower and antenna assembly.

We are working out a lease to allow WCOM's antenna to be located at 1127 Smith Level road, on the property of Manuel Costa and Nancy Park. Manuel and Nancy have moved from the property, where they used to live in a manufactured home. Part of the lease would allow for WCOM to use the existing electrical service at the site, so there wouldn't be a need for any new utilities.

We believe the Costa-Park property would accomplish WCOM's goals regarding the antenna site. We also welcome suggestions from you and your colleagues about alternative approaches that might work better.

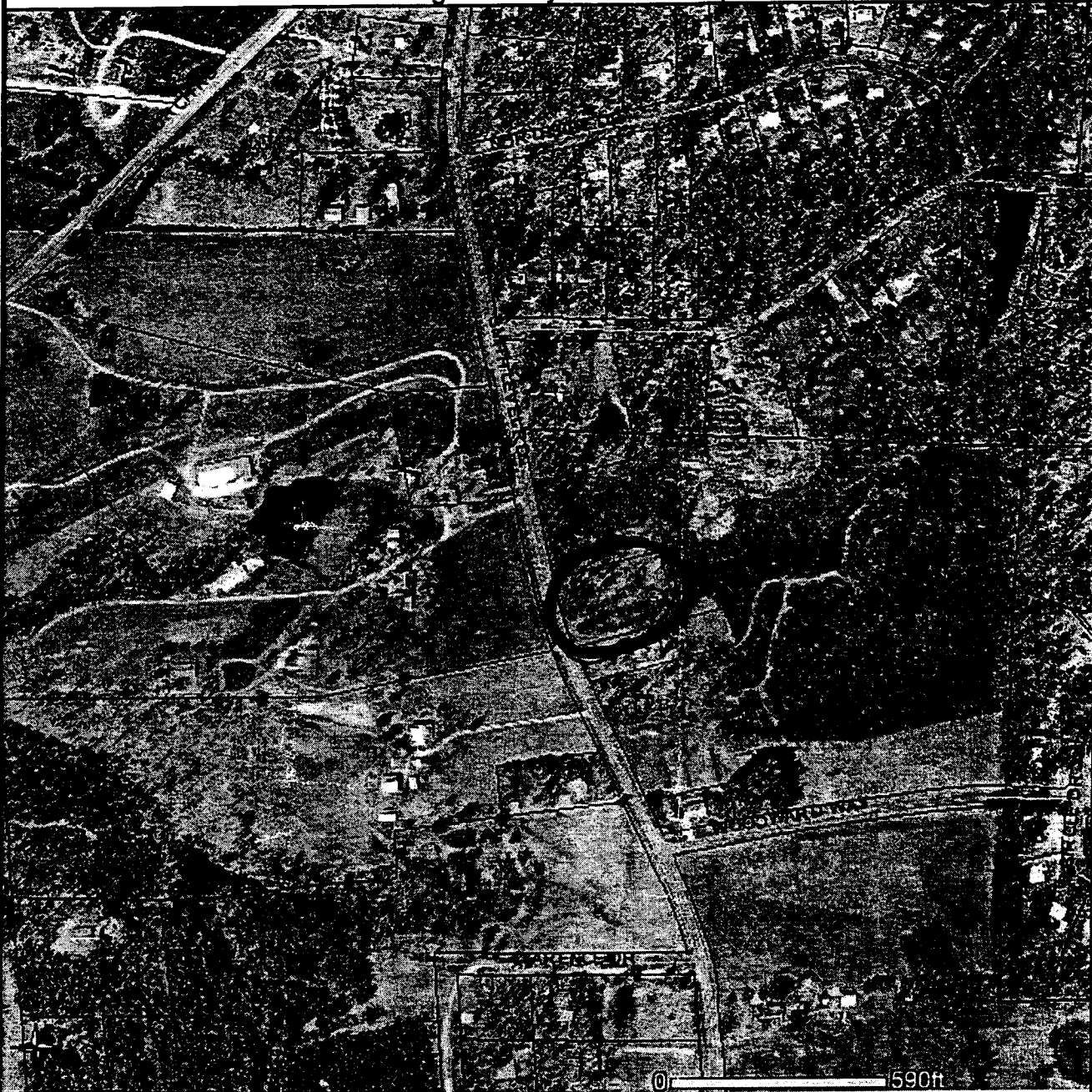
Once again, thank you for your consideration of our petition. I know this is a busy time for Town staff, and we appreciate your time and effort.

Sincerely,



Ruffin Slater, WCOM Radio
929-0010 x116 ruffin@weaverstreetmarket.coop

Orange County N.C. GIS Map



This map contains parcels prepared for the inventory of real property within Orange County, and is compiled from recorded deeds, plats, and other public records and data. Users of this map are hereby notified that the aforementioned public primary information sources should be consulted for verification of the information contained on this map. The county and its mapping companies assume no legal responsibility for the information contained on this map.

This Page Printed Friday, May 7, 2004 5:25 am

Parcels Current Thru 4/23/2004. Owner Information Current Thru 4/15/2004

Parcel Identification Number: PIN=

Summary Building Land Documents Prior Owners Addresses

Create Print Data Page

INCOM ANTENNA ON SMITH LEVEL ROAD

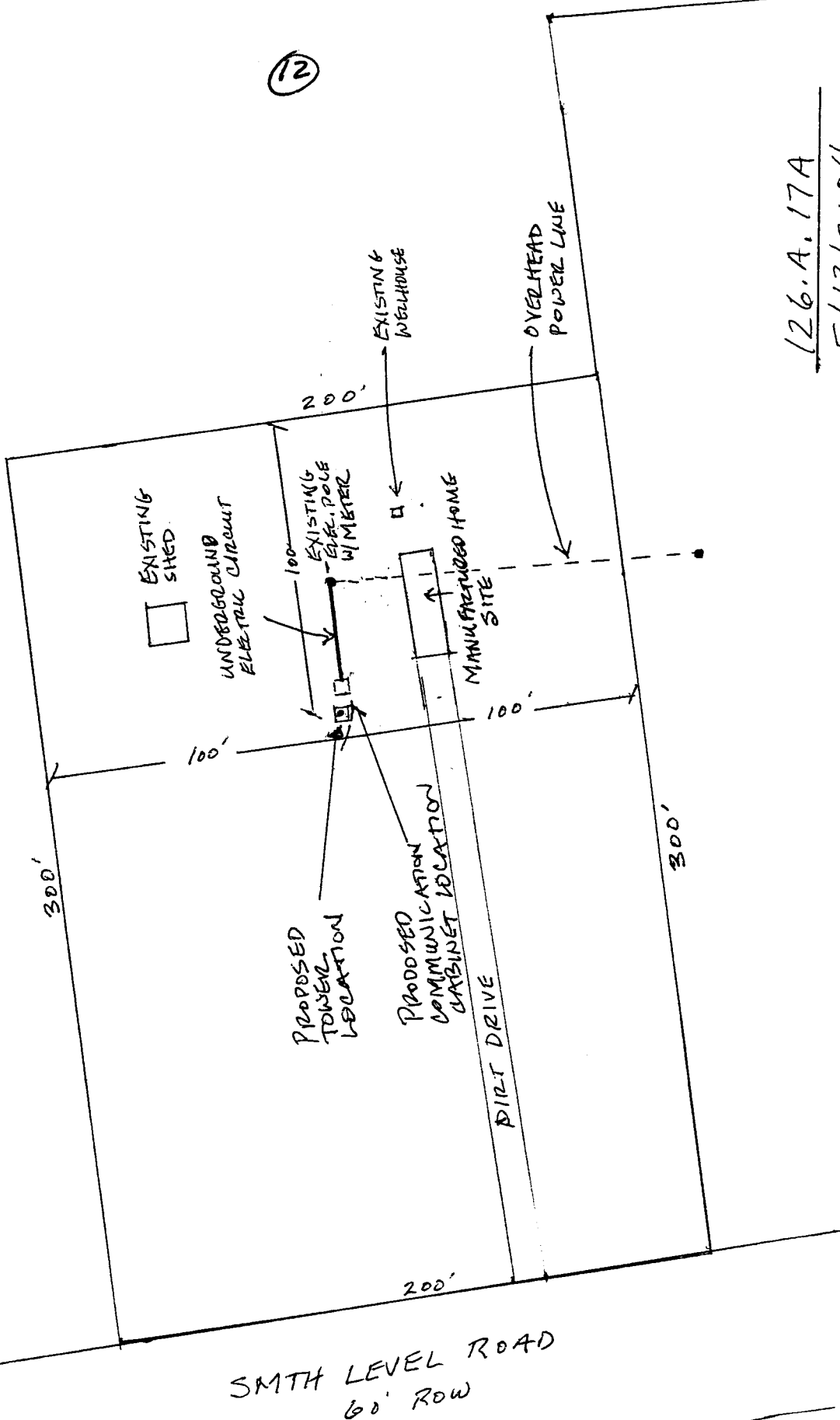
5-13-04

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NOTES

1. PROPOSED TOWER SET BACK FROM PROPERTY LINE MINIMUM OF 80 ft.
2. 80 ft tall tower mounted on 5'x5' CONCRETE BASE
3. 4'x4'x5' tall communication cabinet next to tower

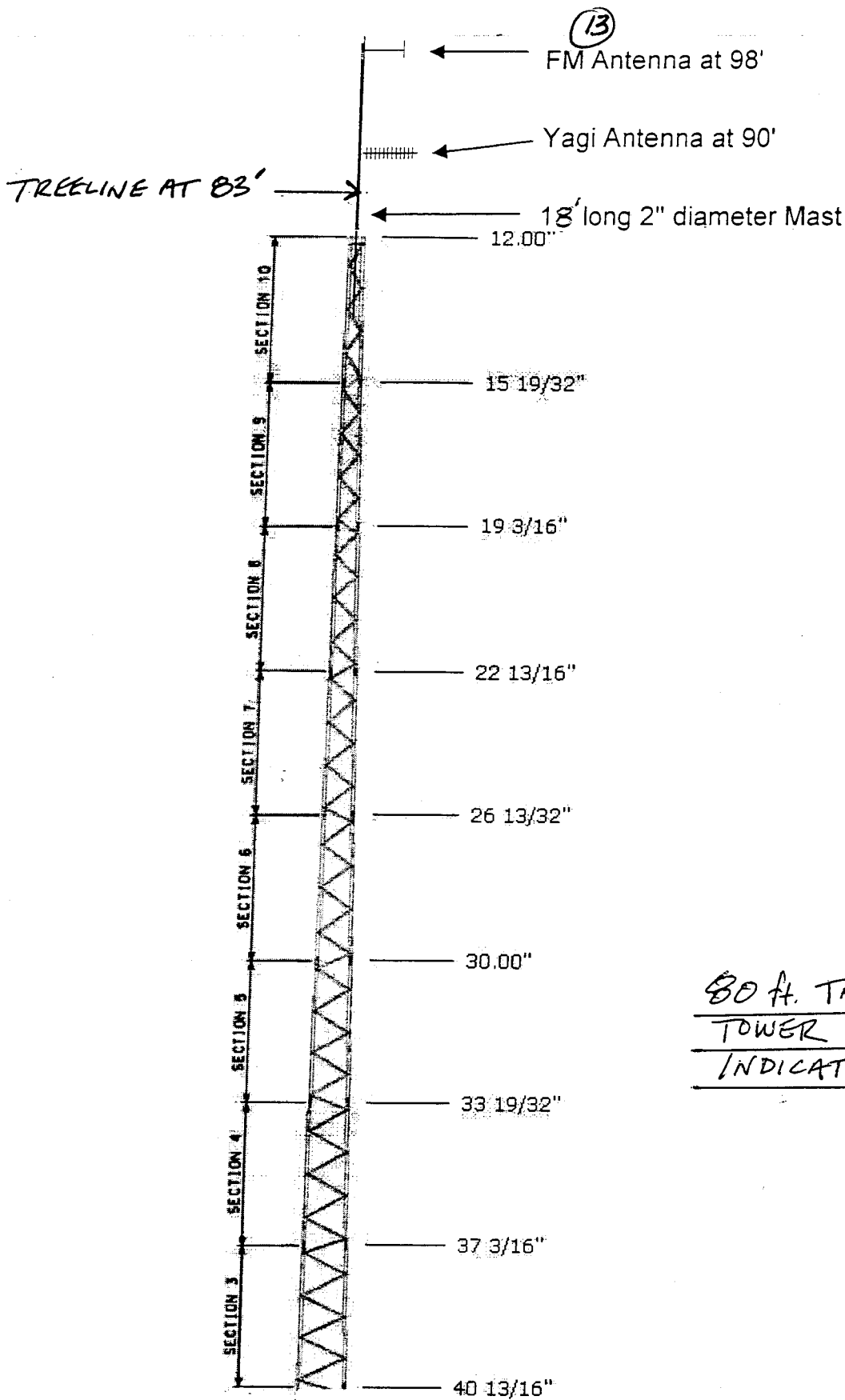
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WCOM ANTENNA ON SMITH LEVEL ROAD

SCALE
1" = 50'



80 FT. TALL TRIANGULAR
TOWER (WIDTHS AS
INDICATED)

WCOM ANTENNA ON SMITH LEVEL ROAD

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3 ft. balloon at 90 ft. on Smith Level Road
To demonstrate visual impact of WCOM antenna

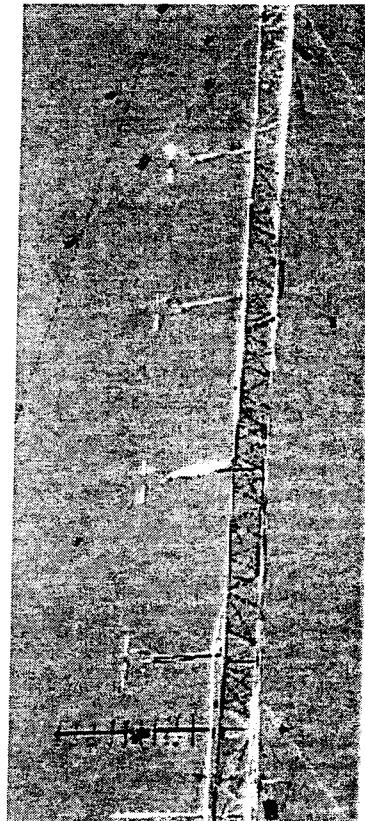
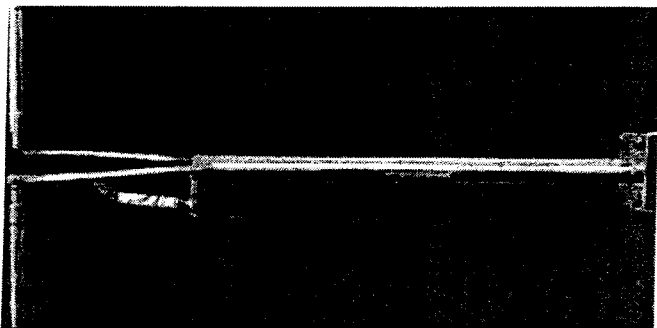


FM CIRCULAR POLARIZATION

MP 1

Technical specifications:

- Frequency Range: 87.5 - 108 Mhz Tunable
- Impedance: 50 OHMs
- Maximun input power: 600 Watts
- Polaritation: Circular
- Total Gain: 0 dBd /dipole
- Horizontal Gain: -3 dB / Dipole
- Vertical Gain: -3 dB / Dipole
- VSWR: 1.1 : 1 +/- 150 KHz
- Azimuthal patterns: Omni (tower influence +/-3dB)
- Input connector: N type female
- Lightning : DC Grounded
- Mounting: 1" to 3" Diameter
- Wind speed: Maximun 120 Mph
- Materials: Stainless steel, Brass, Teflon, PVC
- Dimensions: 36" X 12 "
- Weight: 8.5 Pounds
- Amplitude variation with rotation of polarization vector: ± 1.2 dB

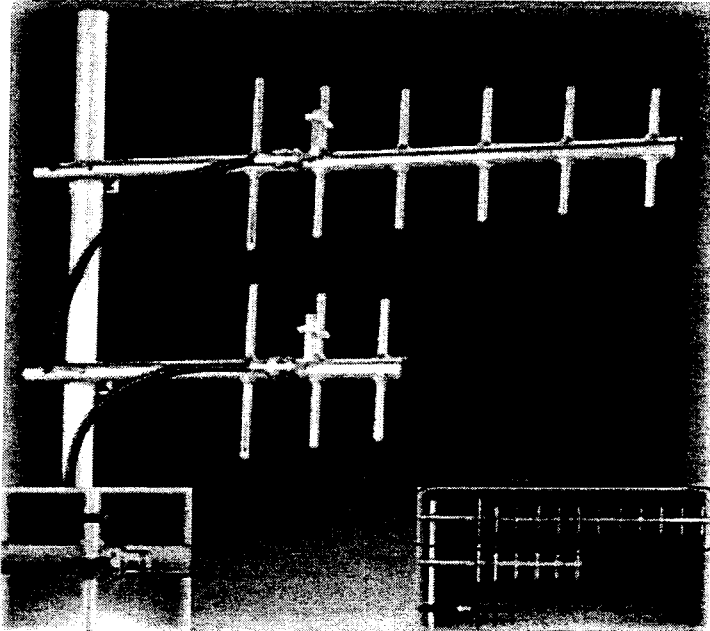


BROADCAST ANTENNA

5/13/04
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Be sure to take a close look! This is undoubtedly the finest designed and fully featured gamma match Yagi in the industry. The fully welded **ANTENEX** Yagi antenna features full 360-degree welds around each element to boom joint and they are fully gold anodized for corrosion resistance. Our engineering staff has optimized this product for forward gain by computer analysis and then field-tested for conformance to the analysis.

Don't forget, each Yagi is hand tuned on an HP® network analyzer for best power match and lowest VSWR. This is your assurance of the best possible performance every time. Each yagi also ships complete with a high quality mounting kit that includes a heavy duty bracket and stainless steel hardware at no extra charge! Whether your installation calls for the super high durability of a fully welded Yagi or the lower cost, yet very high durability of a silver series Yagi, **ANTENEX** promises to be the correct choice for your demanding application.



Inside: 6 Element Yagi, 3 Element Yagi. Left: Plated Brass "N" Connector. Right: Welded Gold Yagi, Silver Yagi, Welded Black Yagi

Technical Data - Product Features & Information

- **VSWR:** <1.5:1
- **Maximum Power:** 500 watts - VHF
300 watts - UHF & 800/900 MHz
- **Impedance:** 50 ohms
- **Mounting:** VHF up to 2" mast. UHF and 800/900 MHz up to 1-5/8" mast.
- **Tuning:** All Yagi's are pre-tuned on a HP® Network Analyzer to the lowest frequency for that model.
- **Elements Material:** 3/8" diameter solid 6061-T6 aluminum
- **Boom Material:** Heat treated 6061-T6 aluminum tube
- **Boom Diameter:** UHF, 800/900 MHz - 7/8"
VHF - 3 dB 7/8", 5 dB 1 1/2"
- **Finish:** Protective gold or black anodized finish. Allow longer lead time for black finish models. Silver Series feature a bright finish.
- **Shipping:** All models are UPS shippable. Welded VHF may require truck freight.
- **Assembly:** VHF models require light assembly. All other models come fully assembled.
- **Mounting:** Stainless steel, brackets included.
- **Termination Type:** N Female. SO239 available upon request (Y883PL uses a SO239 Connector)
- **Lightning Protection:** DC ground
- **Length:**

VHF	3 Element - 41-1/2"	5 Element - 72"
UHF	3 Element - 20-3/16"	5 Element - 37"
	6 Element - 44"	12 Element - 72"
800/900	3 Element - 16-3/4"	6 Element - 27-3/4"
	12 Element - 49"	

Ordering Guide - Clear, Easy & Sensible!

Y4505 = Welded Yagi in gold, 450-470 MHz, 5 Elements.

Y	Antenna Style	Y = Welded and Gold Anodized Yagi YB = Welded and Black Anodized Yagi YS = Silver Series Yagi Black finish is not available on the Silver Series.
	Frequency	Frequency component of part number in bold below: 88-108 136-150 150-174 220-250 250-285 340-360 360-380 380-406 406-430 430-450 450-470 470-490 490-512 806-896 896-970 1850-1970 2400-2500
450	Elements	3 = 3 Elements 5 = 5 Elements 6 = 6 Elements 12 = 12 Elements 15 = 15 Elements

Special Factory Tuning Available For only \$10.00. Mounting brackets included at no extra charge.

Model	Frequency	Elements	Gain	Ratio
FULLY WELDED NON-ANODIZED VHF MODELS				
YXXX3W	User Defined	3	7.1 dBd	17 dB
YXXX5W	User Defined	5	9.2 dBd	20 dB

Note: Please specify frequency when ordering non-anodized models. Available in VHF frequencies only.

GOLD ANODIZED VHF MODELS

Y883PL	88-108 MHz	3	7.1 dBd	17 dB
Y1363	136-150 MHz	3	7.1 dBd	17 dB
Y1365	136-150 MHz	5	9.2 dBd	20 dB
Y1503	150-174 MHz	3	7.1 dBd	17 dB
Y1505	150-174 MHz	5	9.2 dBd	20 dB
Y2203	220-250 MHz	3	7.1 dBd	17 dB
Y2205	220-250 MHz	5	9.2 dBd	20 dB
Y2503	250-285 MHz	3	7.1 dBd	17 dB
Y2505	250-285 MHz	5	9.2 dBd	20 dB

Note: VHF Yagi antennas have bolted elements and require light assembly to allow us to ship UPS

GOLD ANODIZED FULLY WELDED UHF MODELS

Y3403	340-360 MHz	3	7.1 dBd	17 dB
Y3405	340-360 MHz	5	9.2 dBd	20 dB
Y3406	340-360 MHz	6	10.2 dBd	20 dB
Y3603	360-380 MHz	3	7.1 dBd	17 dB
Y3605	360-380 MHz	5	9.2 dBd	20 dB
Y3606	360-380 MHz	6	10.2 dBd	20 dB
Y3803	380-406 MHz	3	7.1 dBd	17 dB
Y3805	380-406 MHz	5	9.2 dBd	20 dB
Y3806	380-406 MHz	6	10.2 dBd	20 dB
Y4063	406-430 MHz	3	7.1 dBd	17 dB
Y4065	406-430 MHz	5	9.2 dBd	20 dB
Y4066	406-430 MHz	6	10.2 dBd	20 dB
Y40612	406-430 MHz	12	11 dBd	20 dB
Y4303	430-450 MHz	3	7.1 dBd	17 dB
Y4305	430-450 MHz	5	9.2 dBd	20 dB
Y4306	430-450 MHz	6	10.2 dBd	20 dB
Y43012	430-450 MHz	12	11 dBd	20 dB
Y4503	450-470 MHz	3	7.1 dBd	17 dB
Y4505	450-470 MHz	5	9.2 dBd	20 dB
Y4506	450-470 MHz	6	10.2 dBd	20 dB
Y45012	450-470 MHz	12	11 dBd	20 dB
Y4703	470-490 MHz	3	7.1 dBd	17 dB
Y4705	470-490 MHz	5	9.2 dBd	20 dB
Y4706	470-490 MHz	6	10.2 dBd	20 dB
Y47012	470-490 MHz	12	11 dBd	20 dB
Y4903	490-512 MHz	3	7.1 dBd	17 dB
Y4905	490-512 MHz	5	9.2 dBd	20 dB
Y4906	490-512 MHz	6	10.2 dBd	20 dB
Y49012	490-512 MHz	12	11 dBd	20 dB

GOLD ANODIZED FULLY WELDED 800/900 MHz MODELS

Y8063	806-896 MHz	3	6 dBd	15 dB
Y8066	806-896 MHz	6	9 dBd	16 dB
Y80612	806-896 MHz	12	11 dBd	20 dB
Y8963	896-970 MHz	3	6 dBd	15 dB
Y8966	896-970 MHz	6	9 dBd	16 dB
Y89612	896-970 MHz	12	11 dBd	20 dB

Note: Welded, black anodized Yagi antennas are the same price as gold models. Allow extra delivery time for black models.

BLACK SILVER FUSION 1.8 AND 2.4 GHz MODELS

YB185015	1850-1970 MHz	15	12.5 dBd	20 dB
YB240015	2400-2500 MHz	15	12.5 dBd	20 dB

ANTENNA FOR RECEIVING SIGNAL FROM STUDIO

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Product Specification

iHELPS™

- ▶ Browse Catalog
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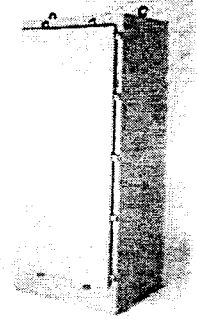
Resources:

- ▶ Technical
- ▶ Chemical Chart



Specifiers Guide

Industrial Enclosures: Free-Standing: Type 4 Enclosures



- Accessories
- Application
- Construction
- Finish
- Options
- Standards

Catalog No.	UPC/EDP No.	Bulletin	Description	Material	Footnotes	Weight	U.S. List Price
 A72H2518FS	27450	A4L	One-Door FS Enclosure Type 4	Painted Steel	1	281.00	\$1,845.00
 A72H3124FS	27460	A4L	One-Door FS Enclosure Type 4	Painted Steel	1	350.00	\$2,251.00
 A72H3724FS	27470	A4L	One-Door FS Enclosure Type 4	Painted Steel	1	384.00	\$2,454.00

1. Millimeter dimensions are for reference only; do not convert metric dimensions to inch.

Accessories

- Casters
- Clamping Nut Kit
- Clip Nut Kit
- Corrosion Inhibitors
- Drawers
- Electrical Interlocks
- Fixed Shelf
- Guides
- Heavy-Duty Panel Supports
- Lighting Kit
- Panels
- Pull-Out Shelf
- Rack Mounting Angles
- Rack Panels
- Screw Package
- Side-Mounted Panels
- Swing-Out Panels
- Swing-Out Rack Mtg. Frame
- Toggle Latch
- Touch-Up Paint (ATPG15GLS)
- Window Kit
- Wiring Duct
- Writing Surface

Application

Designed to protect electrical and electronic controls, components, and instruments in wet, non-corrosive environments. Equipment can be panel mounted or rack mounted. Typical

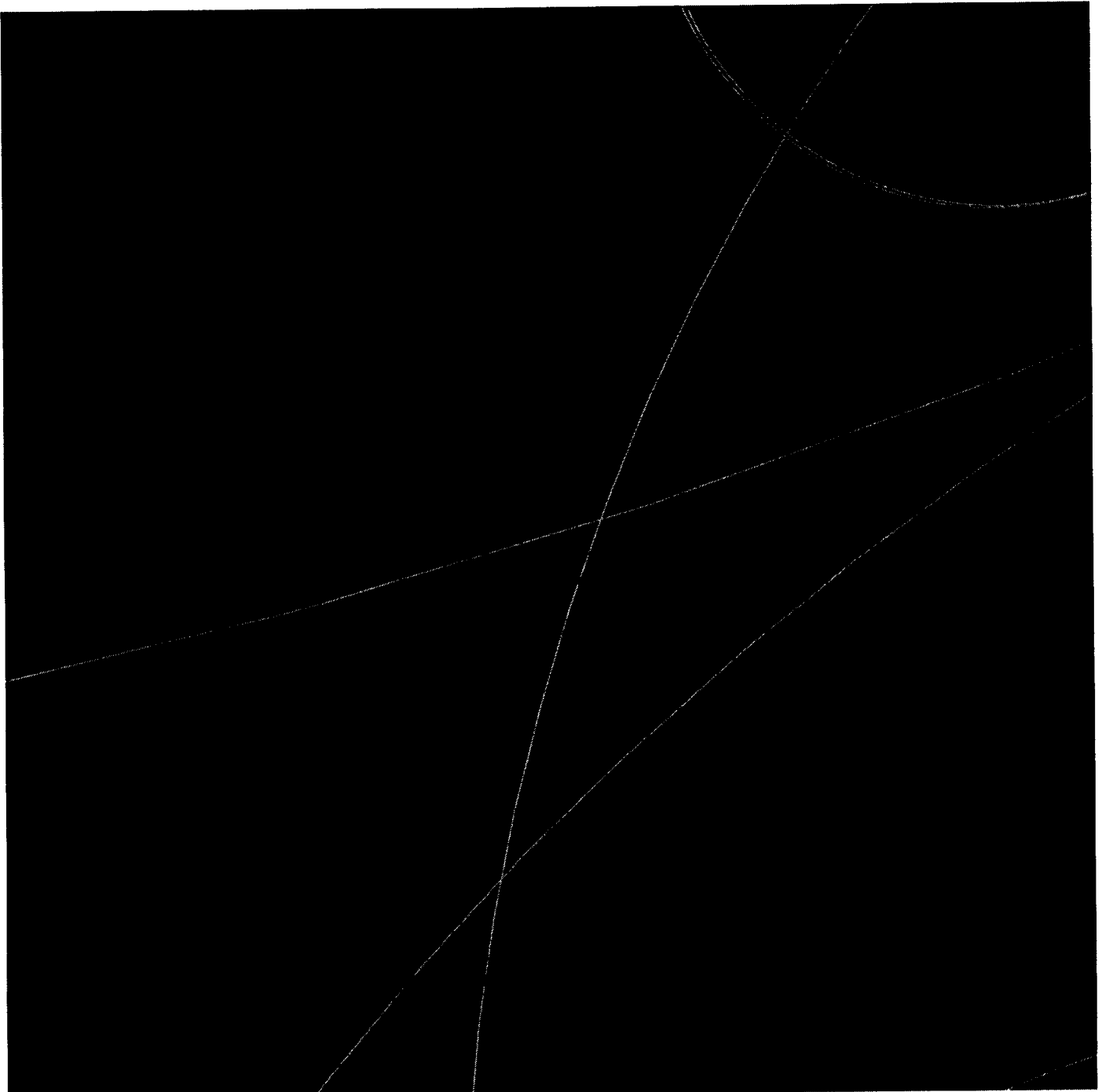
CABINET FOR TRANSMITTER 4'x4'x5' HIGH 5/13/04 126-A-17A

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73.207 Analysis

Brown Broadcast Services, Inc.
Job: WCOM-LP.fmj
Master Database: 2004_Apr_03.fmd
Lat: N35:52:51 Lon: W079:03:50 NAD-27
Scale: 1:75000
Channel: 278 Class: L1
Status: Licensed, Construction Permit, Application, Addition, Vacant/Reserved
Channels: Co-Channel, 1st Adj, 2nd Adj, 3rd Adj, IF, TV6
Range: 20 km, Clearance: -0.5km
Comments: No Comments
Description:

rfInvestigator-FM Version 2.1.14
by rfSoftware, Inc.
Date: 5/6/2004 2:11:35 PM
Key:
Short
Close
Clear



DARKEST AREA INDICATES BROADCAST AREA PERMITTED BY FCC

