



**MADISON COUNTY  
EMERGENCY MANAGEMENT AGENCY**  
Butch Hammack, Director • bhammack@madison-co.com

June 28, 2013

Madison County Board of Supervisors  
Shelton Vance, Comptroller

Gentlemen:

Over the past few months, the Town of Flora and Kearney Park fire departments have expressed some concerns with the county's fire paging system. The complaint has been the inability to hear the pages and general radio coverage on the west side of the county.

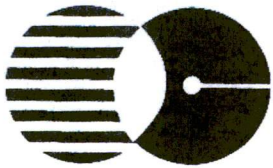
I have been asked to look at our system and identify any issues and make any suggestions for improvement. I have acquired the services of Ozborn Communications to test our system for any issues that it may have.

The radio system along with the radios was tested thoroughly. The radios that had problems were either repaired or replaced. We also determined that some lapses in coverage exist in the system. With that being said, we feel a solution would be to add an additional channel and transmitter and link it to our existing system. This will improve the signal strength on the west side of the county.

I have enclosed two quotes for the costs of this process. Should you have any questions, I will be glad to address them.



Butch Hammack



# Ozborn Communications, LLC

207 North Hargon Street  
 PO Box 307  
 Canton, MS 39046  
 Voice: 601-859-3433  
 Fax: 601-859-7828

# QUOTATION

Quote Number: Q5813I  
 Quote Date: Jun 7, 2013  
 Page: 1

Quoted pricing is valid for 30 days from quote date. If older than 30 days please verify before placing order.

<b>Quoted To:</b>
Madison County E911 PO Box 608 Canton, MS 39046 USA
Customer Fax: 601-859-4743

<b>Ship To:</b>
Butch Hammack Attn: Butch Hammack PO Box 608 Canton, MS 39046 USA

Customer ID	Valid Through	Sales Rep Name	Sales Rep Email
MADI12	7/7/13	Michael K. Ozborn	michael@ozbomcommunications.com

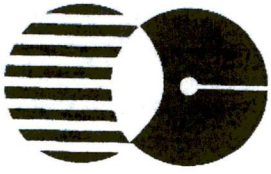
Quantity	Item	Description	Unit Price	Amount
1.00	LABOR JOB MISC	Towercomm South, LLC. will bill \$200 per month tower rental for rack space and tower rental. Will be billed separately from Towercomm South, LLC. Labor relocate repeater from Turcotte Lab to flora ms, water tower. Set up permanent patch to EMA channel. This channel will be a joint use between flora fd and Kearny Park FD. Will install new antenna on Tower at canton repeater site, install new base station, ACU patch, and battery backup system.	11,500.00	11,500.00
1.00	LMR-600	LMR-600 110' CABLE WITH CONNECTORS AND JUMPERS.	515.00	515.00
1.00	ANT150Y7-WR	YAGI, TELEWAVE, 5DB, VHF, WELDED	686.00	686.00
1.00	SEC60BRM	12VDC, 60 AMP, RACK MOUNT POWER SUPPLY, 2/N+1 REDUNDANCY	763.07	763.07
1.00	PA3-1DE-RXRF	136-174 MHz 5-25W In/40-125W Out 19" Rack Mt RF Amp w/ Fan	1,657.25	1,657.25
2.00	12AVR100	BATTERY, 12V, 100A, GEL	376.00	752.00
1.00	DB224-A	150-160 MHz 6dB 4-BAY DIPOLE OMNI BASE STATION ANTENNA	910.57	910.57
160.00	LDF5-50A	7.8" FOAM HELIAX 50 Ohm COAX CABLE	7.50	1,200.00
2.00	L5TNF-PS	CONNECTOR, POSITIVE STOP	36.04	72.08

Sales Rep. Signature: 

All equipment quoted carries the respective manufacturers' warranties. Pricing is valid for entire system as quoted. Individual prices shown may not be available when priced separately.

Subtotal	Continued
Sales Tax	Continued
<b>TOTAL</b>	<b>Continued</b>





# Ozborn Communications, LLC

207 North Hargon Street  
 PO Box 307  
 Canton, MS 39046  
 Voice: 601-859-3433  
 Fax: 601-859-7828

# QUOTATION

Quote Number: Q5813I  
 Quote Date: Jun 7, 2013  
 Page: 2

Quoted pricing is valid for 30 days from quote date. If older than 30 days please verify before placing order.

<b>Quoted To:</b>
Madison County E911 PO Box 608 Canton, MS 39046 USA
Customer Fax: 601-859-4743

<b>Ship To:</b>
Butch Hammack Attn: Butch Hammack PO Box 608 Canton, MS 39046 USA

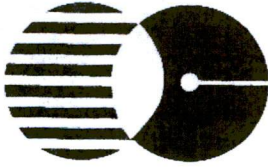
Customer ID	Valid Through	Sales Rep Name	Sales Rep Email
MADI12	7/7/13	Michael K. Ozborn	michael@ozborncommunications.com

Quantity	Item	Description	Unit Price	Amount
1.00	MISC SUPPLIES	N-FEMALE FOR LDF5 FOAM HELIAX 5' lmr-400 JUMPERS, GROUND KITS, WEATHERPROOF CABINET MOUNTS, GROUNDING WIRE, ACU CABLES, AND HARDWARE. CONCRETE FOR CABINET PAD 42"X42"	1,650.00	1,650.00
1.00	License Modification	Fees for preparation, filing, and frequency coordination in relation to FCC license	2,000.00	2,000.00
1.00	FR-5000 01	VHF 50 W REPEATER, FR 4000 03 136-170MHz, 12.5/25 kHz CHANNEL SPACING 100% DUTY CYCLE No POWER SUPPLY, NO DUPLEXER	2,165.00	2,165.00
1.00	TPRD1556	6 CAVITY PASS REJECT DUPLEXER, WITH 100DB ISOLATION.	2,821.56	2,821.56
75.00	PROG MOB PLUG LVL 1	PROGRAMMING CHARGE FOR MOBILE RADIO LEVEL 1, Must be brought to shop for programming, flora fd units, flora pd units, kp fd units	30.00	2,250.00
32.00	PROG POR RADIO LVL 1	PROGRAMMING CHARGE FOR A PORTABLE RADIO LEVEL 1, Must be brought to shop for programming, flora pd & fd Units, kp fd units	25.00	800.00
1.00	IAS-1RU-ANT-SW-SINGL	Single antenna switch for base station operation	583.33	583.33
1.00	SEC40BRM	12VDC, 40 AMP, RACK MOUNT POWER SUPPLY, 2/N+1 REDUNDANCY	660.00	660.00

Sales Rep.  
Signature: 

All equipment quoted carries the respective  
manufacturers' warranties. Pricing is valid for  
entire system as quoted. Individual prices shown  
may not be available when priced separately.

Subtotal	Continued
Sales Tax	Continued
<b>TOTAL</b>	<b>Continued</b>



# Ozborn Communications, LLC

207 North Hargon Street  
PO Box 307  
Canton, MS 39046  
Voice: 601-859-3433  
Fax: 601-859-7828

# QUOTATION

Quote Number: Q5813I  
Quote Date: Jun 7, 2013  
Page: 3

Quoted pricing is valid for 30 days from quote date. If older than 30 days please verify before placing order.

<b>Quoted To:</b>
Madison County E911 PO Box 608 Canton, MS 39046 USA
Customer Fax: 601-859-4743

<b>Ship To:</b>
Butch Hammack Attn: Butch Hammack PO Box 608 Canton, MS 39046 USA

Customer ID	Valid Through	Sales Rep Name	Sales Rep Email
MADI12	7/7/13	Michael K. Ozborn	michael@ozbomcommunications.com

Quantity	Item	Description	Unit Price	Amount
1.00	OD-62DD	62"X34" DEEP DOORS BOTH SIDES OUTDOOR CABINET	3,289.00	3,289.00
1.00	SHIPPING- MISC	SHIPPING MISC	375.00	375.00

Sales Rep.  
Signature: 

All equipment quoted carries the respective manufacturers' warranties. Pricing is valid for entire system as quoted. Individual prices shown may not be available when priced separately.

Subtotal	34,649.86
Sales Tax	
<b>TOTAL</b>	<b>34,649.86</b>



**Central Mississippi  
Communications**

Post Office Box 329  
111 Monroe Street  
Kosciusko, MS 39090  
662.289.3204

# Estimate

Number E62414  
Date 6/24/2013

**Bill To**  
Madison County E911  
PO Box 608  
Canton, MS, 39046

**Ship To**  
Butch Hammack  
Madison County E911  
PO Box 608  
Canton, MS, 39046  
FAX: 601-859-4743

PO Number	Terms	Customer #	Service Rep	Project
	Net - 30		MARK	
Description	Quantity/Hours	Price/Rate	Amount	
Remove and Install repeater station from Turcotte Lab to Water Tower in Flora. Install PATCH to EMA channel. Install antenna at repeater site, ACU patch, install new base and battery back-up.	1.00	\$12,500.00	\$12,500.00	
LMR-600 Times antenna 110 feet cable.	1.00	\$610.00	\$610.00	
ANT150Y10H Telewave, 10 db gain VHF YAGI antenna.	1.00	\$800.00	\$800.00	
RM60BB Rack mount power supply 12VDC 60 AMP	1.00	\$775.00	\$775.00	
PA3-1DE-RXRF rack mount VHF RF amplifier 5-25 watts in / 40-125 watts out.	1.00	\$1,800.00	\$1,800.00	
PS121000 12 volt 100ah GEL CELL	2.00	\$380.00	\$760.00	
DB224A Andrew, 6db gain VHF base antenna.	1.00	\$950.00	\$950.00	
LDF5-50A Andrew, 7/8 inch Helix COAX cable (160 feet)	1.00	\$1,200.00	\$1,200.00	
L5TNF-PS 7/8 inch connectors	2.00	\$45.00	\$90.00	
MISC SUPPLIES: Cables, jumpers grounding wire, ACU cables, Concrete Pad,	1.00	\$1,800.00	\$1,800.00	
FCC License and Coordination Fees	1.00	\$2,500.00	\$2,500.00	
NXR-710K Kenwood 100 watt VHF repeater station digital / analog, 12.5khz 6.25 khz all mounted in open rack with duplexer	1.00	\$5,817.00	\$5,817.00	
Program Mobile radios:	65.00	\$35.00	\$2,275.00	
Program Portable radios:	32.00	\$25.00	\$800.00	
1RU-ANT-SW-SINGLE	1.00	\$590.00	\$590.00	
SEC40BRM rack mount 12 volt 0 amp power supply	1.00	\$670.00	\$670.00	
OD-62DD outdoor equipment cabinet 62"X34"	1.00	\$3,300.00	\$3,300.00	





Post Office Box 329  
 111 Monroe Street  
 Kosciusko, MS 39090  
 662.289.3204

**Estimate**

Number E62414  
 Date 6/24/2013

**Bill To**  
 Madison County E911  
 PO Box 608  
 Canton, MS, 39046

**Ship To**  
 Butch Hammack  
 Madison County E911  
 PO Box 608  
 Canton, MS, 39046  
 FAX: 601-859-4743

PO Number	Terms	Customer #	Service Rep	Project
	Net - 30		MARK	

Description	Quantity/Hours	Price/Rate	Amount
-------------	----------------	------------	--------

Amount Paid	\$0.00	Discount	\$0.00
Amount Due	\$37,237.00	Shipping Cost	\$0.00
The County will be billed \$200 per month for tower rental.		Sub Total	\$37,237.00
		Sales Tax 7.00% on \$0.00	\$0.00
<hr/> Mark T. Clark		<b>Total</b>	<b>\$37,237.00</b>