

**RESOLUTION
ROCK COUNTY BOARD OF SUPERVISORS**

Kathren Sukus
INITIATED BY



Kathren Sukus, Director
DRAFTED BY

Public Safety and Justice
SUBMITTED BY

January 22, 2019
DATE DRAFTED

AUTHORIZATION FOR RADIO SYSTEM EQUIPMENT UPGRADE AND SIMULCAST

1 **WHEREAS**, the 911 Communications Center is responsible for the continuous operation of the public safety radio
2 system infrastructure in Rock County; and,
3
4 **WHEREAS**, the MASTR III equipment (repeaters, base stations, and receivers) for the public safety radio system
5 is at end of life for most channels and must be replaced over the next five years in order to maintain the integrity
6 of the system; and,
7
8 **WHEREAS**, the County Tac Repeater, Rock Fire Central Repeater, and Beloit Tac 6 link will be the first channels
9 updated; and,
10
11 **WHEREAS**, through feedback from Rock County public safety responders we have found that there are still
12 portable radio coverage issues in certain parts of the county on County Tac and Rock Fire Central channels; and,
13
14 **WHEREAS**, at the same time of the equipment update for these channels simulcast will be added to improve
15 portable radio coverage in Clinton, Edgerton, Milton, and the Town of Avon; and,
16
17 **WHEREAS**, General Communications, Inc. of Madison, Wisconsin is the maintenance provider for the Rock
18 County public safety radio system infrastructure as well as the Communications Center's radio console equipment;
19 and,
20
21 **WHEREAS**, total cost for equipment, configuration, programming, installation, and FCC frequency coordination
22 for this project is \$673,390.99; and,
23
24 **WHEREAS**, this project was budgeted and funding is available.
25
26 **NOW, THEREFORE, BE IT RESOLVED** by the Rock County Board of Supervisors duly assembled this
27 14th day of February, 2019 that a contract be awarded to General Communications, Inc. of
28 Madison, Wisconsin, in the amount of \$673,390.99 to coordinate and implement this project.

19-2A-182

Respectfully submitted,

PUBLIC SAFETY AND JUSTICE COMMITTEE

Mary Beaver
Mary Beaver, Chair

Phillip Owens
Phillip Owens

Terry Fell
Terry Fell

Kara Hawes
Kara Hawes

Brian Knudson
Brian Knudson

ADMINISTRATIVE NOTE:

Recommended.

Josh Smith
Josh Smith
County Administrator

FISCAL NOTE:

Funds were included in the 2019 budget for these two projects. These projects are being funded by sales tax revenue.

Sherry Oja
Sherry Oja
Finance Director

LEGAL NOTE:

The County Board is authorized to take this action pursuant to secs. 59.01 and 59.51, Wis. Stats. In addition, sec. 59.52(29), Wis. Stats. requires the project to be let to the lowest responsible bidder. General Communications, Inc., is the sole source provider.

Richard Greenlee
Richard Greenlee
Corporation Counsel

EXECUTIVE SUMMARY

In 2017 the Communications Center was notified that the Harris MASTR III equipment (repeaters, base stations, and receivers) that are required for every public safety radio channel in the County are at End of Life and must be replaced over the next five years. Most of this equipment was installed in the mid-1990's and 2001. The equipment was also re-used and converted to P25 (digital) in 2012 in order to save money during the countywide upgrade for the FCC narrow-banding mandate in 2013.

There are thirteen repeated channels that will need to be updated over the next several years. Approximately two to three channels will be updated per year until all are completed.

In 2019 the County Tac Repeater, Rock Fire Central Repeater, and Beloit Tac 6 link (for County Tac Repeater) will be updated. These channels are utilized regularly by all law enforcement and fire/EMS agencies in the County. At the same time as the update, simulcast will be added to the repeater channels to improve portable radio coverage as has already been done with the County Main and Rock Fire Main channels.

The total cost of the project is \$673,390.99 to include equipment, FCC licensing fees, configuration, programming, and installation. This project was budgeted and approved for 2019.

General Communications is the only certified Harris-Tait (radio system) and Mindshare (dispatch radio consoles) technician in the area and they are the maintenance provider for the Communications Center. Much of the equipment and labor for this project has been priced off NASPO and the State of Wisconsin contracts.



January 17, 2019

Rock County Communications
3636 N County Highway F
Janesville, WI 53545

RE: Radio System Upgrades

The following is our quote to upgrade the Rock TAC, Beloit TAC 6 and Rock Fire Central digital radio channels. Pricing is based off the NASPO and State of Wisconsin contracts where available. Hyperlinks are provided to each contract.

Summary:

<u>Item</u>	<u>NASPO Price</u>
Rock TAC	\$ 146,589.75
Beloit TAC 6	\$ 68,587.25
Rock Fire Central	\$ 192,268.25
Antenna System	\$ 226,297.66
Console Interface	\$ 39,648.08
Total:	\$ 673,390.99

Detailed Parts List:

Rock TAC - 6 TX/RX & 3 RX Only		<u>Part #</u>	<u>Contract</u>	<u>Contract #</u>	<u>Vendor</u>	<u>NASPO</u>	<u>Extended</u>
6	Chassis, TB9400, Single, 100W	TB9435S-100H	NASPO	06913	Harris/Tait	\$ 909.75	\$ 5,458.50
6	Reciter, TB9400, 148-174 MHz	T01-01103-DAAA	NASPO	06913	Harris/Tait	\$ 4,557.00	\$ 27,342.00
6	Linear Pwr Amp, TB9400, 148-174 MHz, 100W	T01-01121-DBBA	NASPO	06913	Harris/Tait	\$ 1,914.00	\$ 11,484.00
6	PMU, TB9000, AC Aux 12	TBA30A0-0100	NASPO	06913	Harris/Tait	\$ 861.00	\$ 5,166.00
6	SFE - P25 Common Air Interface (CAI)	TBAS050	NASPO	06913	Harris/Tait	\$ 2,539.50	\$ 15,237.00
1	SFE - Central Voter	TBAS061	NASPO	06913	Harris/Tait	\$ 3,744.75	\$ 3,744.75
5	SFE - IP Networking Satellite	TBAS071	NASPO	06913	Harris/Tait	\$ 2,118.75	\$ 10,593.75
6	SFE - Simulcast Enable	TBAS062	NASPO	06913	Harris/Tait	\$ 2,118.75	\$ 12,712.50
3	Chassis, TB9400, Single Receiver x1	TB9444-RX1H	NASPO	06913	Harris/Tait	\$ 815.25	\$ 2,445.75
3	Rx Only, TB9400, 148-174 MHz	T01-01104-DAAA	NASPO	06913	Harris/Tait	\$ 2,267.25	\$ 6,801.75
3	PMU, TB9000, AC Aux 12	TBA30A0-0100	NASPO	06913	Harris/Tait	\$ 861.00	\$ 2,583.00
3	SFE - P25 Common Air Interface (CAI) Rx Only	TBAS050-R0	NASPO	06913	Harris/Tait	\$ 1,269.75	\$ 3,809.25
3	SFE - IP Networking Satellite, RX-Only	TBAS071-R0	NASPO	06913	Harris/Tait	\$ 295.50	\$ 886.50
1	FCC Licensing and Coordination	FCC	N/A	N/A	N/A	\$ 4,000.00	\$ 4,000.00
1	Miscellaneous Materials	Service Material	N/A	N/A	N/A	\$ 200.00	\$ 200.00
10	Grounding	Labor	NASPO	06913	Harris	\$ 150.00	\$ 1,500.00
30	Program Management	Labor	NASPO	06913	Harris	\$ 187.50	\$ 5,625.00
40	Equipment Configuration and system design	Labor	NASPO	06913	Harris	\$ 187.50	\$ 7,500.00
130	Equipment Installation	Labor	NASPO	06913	Harris	\$ 150.00	\$ 19,500.00
						Total:	\$ 146,589.75

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GENERAL COMMUNICATIONS

your safety is our business

Beloit TAC 6 - 1 TX/RX & 5 RX Only

<u>Qty</u>	<u>Description</u>	<u>Part #</u>	<u>Contract</u>	<u>Contract #</u>	<u>Vendor</u>	<u>NASPO</u>	<u>Extended</u>
1	Chassis, TB9400, Single, 100W	TB9435S-100H	NASPO	06913	Harris/Tait	\$ 909.75	\$ 909.75
1	Reciter, TB9400, 440-480 MHz	T01-01103-LAAA	NASPO	06913	Harris/Tait	\$ 4,557.00	\$ 4,557.00
1	Linear Pwr Amp, TB9400, 440-480 MHz, 100W	T01-01121-LAAA	NASPO	06913	Harris/Tait	\$ 1,914.00	\$ 1,914.00
1	PMU, TB9000, AC Aux 12	TBA30A0-0100	NASPO	06913	Harris/Tait	\$ 861.00	\$ 861.00
1	SFE - P25 Common Air Interface (CAI)	TBAS050	NASPO	06913	Harris/Tait	\$ 2,539.50	\$ 2,539.50
1	SFE - Central Voter	TBAS061	NASPO	06913	Harris/Tait	\$ 3,744.75	\$ 3,744.75
1	SFE - Simulcast Enable	TBAS062	NASPO	06913	Harris/Tait	\$ 2,118.75	\$ 2,118.75
5	Chassis, TB9400, Single Receiver x1	TB9444-RX1H	NASPO	06913	Harris/Tait	\$ 815.25	\$ 4,076.25
5	Rx Only, TB9400, 440-480MHz	T01-01104-LAAA	NASPO	06913	Harris/Tait	\$ 2,267.25	\$ 11,336.25
5	PMU, TB9000, 12VACDC Aux 12V	TBA30A1-1100	NASPO	06913	Harris/Tait	\$ 1,223.25	\$ 6,116.25
5	SFE - P25 Common Air Interface (CAI) Rx Only	TBAS050-R0	NASPO	06913	Harris/Tait	\$ 1,269.75	\$ 6,348.75
5	SFE - IP Networking Satellite, RX Only	FCC	NASPO	06913	Harris/Tait	\$ 295.50	\$ 1,477.50
1	FCC Licensing and Coordination	Service Material	N/A	N/A	N/A	\$ 1,500.00	\$ 1,500.00
1	Miscellaneous Materials	Labor	N/A	N/A	N/A	\$ 200.00	\$ 200.00
8	Grounding	Labor	NASPO	06913	Harris	\$ 150.00	\$ 1,200.00
25	Program Management	Labor	NASPO	06913	Harris	\$ 187.50	\$ 4,687.50
100	Equipment Installation	Labor	NASPO	06913	Harris	\$ 150.00	\$ 15,000.00
						Total:	\$ 68,587.25

Rock Fire Central - 6 TX/RX & 9 RX Only

<u>Qty</u>	<u>Description</u>	<u>Part #</u>	<u>Contract</u>	<u>Contract #</u>	<u>Vendor</u>	<u>NASPO</u>	<u>Extended</u>
6	Chassis, TB9400, Single, 100W	TB9435S-100H	NASPO	06913	Harris/Tait	\$ 909.75	\$ 5,458.50
6	Reciter, TB9400, 148-174 MHz	T01-01103-DAAA	NASPO	06913	Harris/Tait	\$ 4,557.00	\$ 27,342.00
6	Linear Pwr Amp, TB9400, 148-174 MHz, 100W	T01-01121-DBBA	NASPO	06913	Harris/Tait	\$ 1,914.00	\$ 11,484.00
6	PMU, TB9000, AC Aux 12	TBA30A0-0100	NASPO	06913	Harris/Tait	\$ 861.00	\$ 5,166.00
6	SFE - P25 Common Air Interface (CAI)	TBAS050	NASPO	06913	Harris/Tait	\$ 2,539.50	\$ 15,237.00
2	SFE - Central Voter	TBAS061	NASPO	06913	Harris/Tait	\$ 3,744.75	\$ 7,489.50
4	SFE - IP Networking Satellite	TBAS071	NASPO	06913	Harris/Tait	\$ 2,118.75	\$ 8,475.00
6	SFE - Simulcast Enable	TBAS062	NASPO	06913	Harris/Tait	\$ 2,118.75	\$ 12,712.50
9	Chassis, TB9400, Single Receiver x1	TB9444-RX1H	NASPO	06913	Harris/Tait	\$ 815.25	\$ 7,337.25
9	Rx Only, TB9400, 148-174 MHz	T01-01104-DAAA	NASPO	06913	Harris/Tait	\$ 2,267.25	\$ 20,405.25
9	PMU, TB9000, AC Aux 12	TBA30A0-0100	NASPO	06913	Harris/Tait	\$ 861.00	\$ 7,749.00
9	SFE - P25 Common Air Interface (CAI) Rx Only	TBAS050-R0	NASPO	06913	Harris/Tait	\$ 1,269.75	\$ 11,427.75
9	SFE - IP Networking Satellite	TBAS071-R0	NASPO	06913	Harris/Tait	\$ 295.50	\$ 2,659.50
1	FCC Licensing and Coordination	FCC	N/A	N/A	N/A	\$ 4,000.00	\$ 4,000.00
1	Miscellaneous Materials	Service Material	N/A	N/A	N/A	\$ 400.00	\$ 400.00
12	Grounding	Labor	NASPO	06913	Harris	\$ 150.00	\$ 1,800.00
30	Program Management	Labor	NASPO	06913	Harris	\$ 187.50	\$ 5,625.00
40	Equipment Configuration and system design	Labor	NASPO	06913	Harris	\$ 187.50	\$ 7,500.00
200	Equipment Installation	Labor	NASPO	06913	Harris	\$ 150.00	\$ 30,000.00
						Total:	\$ 192,268.25

Antenna System

<u>Qty</u>	<u>Description</u>	<u>Part #</u>	<u>Contract</u>	<u>Contract #</u>	<u>Vendor</u>	<u>NASPO</u>	<u>Extended</u>
6	4 Channel VHF TX/RX Combiner	18US4569	N/A	N/A	Comprod	\$ 25,675.31	\$ 154,051.88
2	Dual VHF Antenna for Watertower	845-70	N/A	N/A	Comprod	\$ 1,356.30	\$ 2,712.60
8	VHF Antenna, 4-Bay Dipole 8.5dB	874F-70SM	N/A	N/A	Comprod	\$ 1,467.00	\$ 11,736.00
12	Filter, Lightning, 125-1000	7239	NASPO	06913	Harris	\$ 90.00	\$ 1,080.00
400	1/2" Superflex Cable	LCF12-50J	NASPO	06913	Harris	\$ 2.48	\$ 990.00

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60	1/2" Superflex Connectors	CN-015467-001	NASPO	<u>06913</u>	Harris	\$ 36.00	\$ 2,160.00
500	1/4" Superflex Cable	CA-015465-001	NASPO	<u>06913</u>	Harris	\$ 1.76	\$ 877.50
46	1/4" Superflex Connectors	CN-018354-001	NASPO	<u>06913</u>	Harris	\$ 27.00	\$ 1,242.00
33	Network Patch Cable	N200-010-BL	N/A	N/A	Tessco	\$ 7.51	\$ 247.68
1	Miscellaneous Materials	Service Material	N/A	N/A	N/A	\$ 200.00	\$ 200.00
1	Shipping	Shipping	N/A	N/A	N/A	\$ 3,000.00	\$ 3,000.00
6	Equipment Installation, Antenna	Labor	NASPO	<u>06913</u>	Harris	\$ 4,000.00	\$ 24,000.00
6	Equipment Installation	Labor	NASPO	<u>06913</u>	Harris	\$ 4,000.00	\$ 24,000.00
Total:						\$ 226,297.66	

Console Interface

<u>Qty</u>	<u>Description</u>	<u>Part #</u>	<u>Contract</u>	<u>Contract #</u>	<u>Vendor</u>	<u>NASPO</u>	<u>Extended</u>
1	Mindshare DFSI Interface Redundant P25 DFSI	750M-P25-201 MS-CAR-GS-R	State of Wis	<u>13-5458</u>	Mindshare	\$ 15,600.00	\$ 15,600.00
1	Mindshare High Availability DFSI License	750M-P25-211 MS-CAR-GS-HA	State of Wis	<u>13-5458</u>	Mindshare	\$ 9,348.48	\$ 9,348.48
3	CAR Stream License, Per DFSI radio connection	750M-P25-210 MS-CAR-GS-ST	State of Wis	<u>13-5458</u>	Mindshare	\$ 1,483.20	\$ 4,449.60
1	Miscellaneous Materials	Miscellaneous	N/A	N/A	N/A	\$ 200.00	\$ 200.00
20	Equipment Configuration and system design	Labor	NASPO	<u>06913</u>	Harris	\$ 187.50	\$ 3,750.00
42	Installation and Configuration	Labor	NASPO	<u>06913</u>	Harris	\$ 150.00	\$ 6,300.00
Total:						\$ 39,648.08	

Note: FCC must approve all new simulcast transmit sites before we can start transmitting at those sites.

If you have any questions, please email rwestgard@gencomm.com or call 608-310-7127.

Sincerely,

Rich Westgard

Rich Westgard
Service Manager

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2880 Commerce Park Drive
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