

**Town of Somers, CT  
UHF Radio System  
Request for proposal**

**REQUEST FOR PROPOSAL**

The Town of Somers is seeking proposals to provide and install an FM analog voice UHF radio system. This system will include the purchase of new mobile and portable radios, as well as a new repeater system and associated control station. This system is intended for use by Somers Public Works, Police, and Administrative personnel.

**BIDDER INSTRUCTIONS**

**October 16, 2012 – 2:00 PM – Required Inspection**

An inspection of the building and vehicles in which equipment will be installed will be held at the Somers Highway Dept. office, 93 Egypt Road, Somers, CT 06071. **All parties who desire to submit a proposal must attend.**

**October 24, 2012 – 12:00 Noon – Submission Deadline**

**Proposals shall be addressed to:**

Town of Somers  
Town Clerk  
PO box 308  
600 Main St.  
Somers, CT 06071.

The words "UHF RADIO SYSTEM", the date, and the bid opening time must be stated on the face of the bid envelope. **It is the bidder's responsibility to see that their proposals arrive on time.** Late proposals, telegram, facsimile or telephones bids shall not be considered.

Proposals are due at the Town Clerks office no later than 12:00pm on October 24, 2012.

Proposals will be opened in the Selectman's office conference room at 12:15pm on October 24, 2012. Changes will not be accepted after the proposals are opened.

**Proposals will be considered in two (2) tiers.**

Tier one shall be those proposals which substantially offer the exact make and model of equipment contained in this request.

Tier Two shall be comprised of those proposals which substantially offer equipment that is claimed to be equal or better than that contained in this request, but not the exact equipment requested.

Preference shall be given to those proposals qualifying for Tier One.

This Request for Proposal and any addendum shall be issued on the Town web page [www.Somersct.gov](http://www.Somersct.gov). it shall be the responsibility of all interested firms to check the website for addenda prior to submitting a response to this Request for Proposal. No questions will be accepted or addendum issued after Friday October 19, 2012 unless it is to postpone the due date. All questions and correspondence should be directed to:

Ann Logan  
Town Clerk  
600 Main Street  
PO Box 308  
Somers, CT 06071

The Town of Somers reserves the right to reject any and all bids, or to accept any bid, which would be in the best interest of The Town of Somers, whether or not that bid was the lowest monetary bid, and further reserves the right to waive any informalities, omissions, excess verbiage, or technical defects in the bidding or changes in the specifications which would result in better service to the Town of Somers at its option.

Bidders should be an Affirmative Action/Equal Opportunity Employer. Minority/Women Business Enterprises are encouraged to apply.

## General Requirements

1. All equipment to be provided shall be of new, first quality manufacture. Used, refurbished, or remanufactured equipment will not be accepted.
2. All proposals shall include the period of time for which the stated prices are applicable.
3. All equipment shall be capable of operation in the frequency range of 450-470 MHz.
4. All installation of equipment shall be performed in a manner consistent with prevailing trade practice and methods.
5. Proposals offering equipment other than the make and model contained in the specification shall state the reason for not quoting the specified item.
6. The frequencies to be installed in the provided radios shall be provided to the successful bidder, and may vary from radio to radio.
7. The prices quoted for items appearing in the Options portion of this request shall not be used in determining the outcome of the bid.
8. The mobile, portable and PWD Garage radios provided under this request shall be delivered and installed prior to December 31, 2012.
9. The repeater system described herein should be installed as soon as possible. The Town acknowledges that installation and operation may not be possible prior to December 31, 2012.
10. The provider shall be responsible for scheduling and coordination with the owner/manager of the transmitter site for the installation of the repeater system.

# Town of Somers, CT

## UHF Radio System

### Public Works Garage Radio

The Town of Somers seeks to purchase a radio system for the Public Works Garage that shall include a radio transceiver, 13.8 volt power supply, antenna system, and four (4) Local Extended Remote points.

The system shall be comprised of the following:

One (1) **ICOM IC-F-6021** (400-470 MHz range) mobile transceiver, with maximum output power limited to 25 watts.

The radio shall be equipped with

- ICOM mobile mounting bracket and hardware
- DC cable with fuses
- ICOM HM-152 Hand Microphone

The radio shall be mounted upon and connected to:

**Samlex America Mdl SEC1223-IC3** - Switching Power Supply and Radio Enclosure for ICOM F-6021 radio.

The antenna system shall be:

**Times Microwave LMR-400DB** (Direct Burial) 50 ohm coaxial cable.

**Alpha-Delta Mdl TT3G50 Coaxial Surge Suppressor**, 50 ohms impedance with "N" connectors both sides, rated at 200 watts.

**Alpha-Delta Mdl UCGC Copper Ground Rod Clamp** - The surge suppressor shall be mounted on the UCGC clamp, which shall be attached to a minimum 8 foot long 5/8 inch diameter copper clad **ground rod** driven into the ground adjacent to the antenna feedline's entry point into the building.

## **Public Works Garage Radio** (continued)

**Laird Technologies Mdl FG4500** omnidirectional, unity gain, fiberglass antenna with “N” connector.

The local extended remote stations shall be as follows:

### **CPI Communications**

<b>Mdl 10-M-I-BLK</b>	Deputy Director’s Office
<b>Mdl 20-BLK</b>	Clerk’s Office
<b>Mdl 30-WM-BLK</b>	Mechanic’s Bay
<b>Mdl 30-WM-BLK</b>	Garage

All remotes shall be single channel, with Monitor and Intercom capability, wired in parallel. All cases shall be black. 13.8 volt DC power for the remote stations shall be obtained from the radio power supply.

Radio and power supply shall be supplied with manufacturers’ warranties of not less than two (2) years, included in the cost of the equipment.

Price shall include removal of any existing radios and antennas and transmission lines, and the installation of new radio system and antenna.

Price shall include all necessary connectors, leads, wiring, hardware, support masts, fittings and incidental supplies.

Frequency assignments and programming of specific radio features shall be coordinated with the Town by the successful bidder.

# Town of Somers, CT

## UHF Radio System

### Mobile Radios

The Town of Somers seeks to purchase:

Not less than twenty-two (22) **ICOM IC-F-6021** (400-470 MHz range) mobile transceivers.

Maximum output power shall be limited to 25 watts.

Each radio shall be supplied complete with:

- ICOM mobile mounting bracket and hardware
- DC cable with fuses
- ICOM HM-152 Hand Microphone
- ICOM HM-148G Heavy Duty Microphone
- Pulse/Larsen LM Mount with Larsen Q-series quarter-wave whip antenna, RG-58 coax and PL-259 connector

**NOTE: *Two (2) of the vehicles have 24 volt electrical systems, and voltage convertors will be required.*** (See Vehicle List).

Radios shall be supplied with a manufacturer's warrantee of not less than two (2) years, included in the cost of each radio.

Price shall include removal of any existing mobile radios and antennas, and installation of new radio and antenna. Holes in vehicle exteriors caused by antenna removal shall be sealed with hole plugs at no additional cost.

Frequency assignments and programming of specific radio features shall be coordinated with the Town by the successful bidder.

# **Town of Somers, CT**

## **UHF Radio System**

### **Options**

The price of options shall not be considered when evaluating proposals.  
The prices are requested for planning purposes.

#### **Portable Radio Batteries**

ICOM Mdl. BP-232N Li-Ion Battery

#### **Portable Radio Fixed Leather Belt Hanger**

ICOM Mdl. MB-96F

#### **Portable Radio Speaker Microphone**

ICOM Mdl. HM-159L

#### **Portable Radio Vehicle Charger Bracket with Power Cord**

ICOM Mdl. MB-130 Bracket  
ICOM Mdl. OPC-515L Power Cord

#### **Multi-Pocket Portable Radio Battery Charger and Power Supply**

ICOM Mdl. BC-197 Six Pocket Charger  
ICOM Mdl. BC-157S Charger AC Power Supply

## **Options**

(continued)

### **Mobile DTMF Microphone**

ICOM Mdl. 148T

### **Mobile Radio External Speaker**

ICOM Mdl. SP-5



# Town of Somers, CT

## UHF Radio System

### Portable Radios

Somers seeks to purchase:

Fifteen (15) **ICOM IC-F-4011** (400-470 MHz range) handheld transceivers

Each radio shall be supplied complete with

ICOM BP-232N Li-ion battery

ICOM BC-160 Rapid Charger

ICOM BC-145SA AC Adapter

ICOM MB-94 Belt Clip

Quarter-wave whip antenna consistent with frequency range

Portable radios shall be supplied with a manufacturer's warrantee of not less than two (2) years, included in the cost of each radio.

Frequency assignments and programming of specific radio features shall be coordinated with the Town by the successful bidder.

# Town of Somers, CT

## UHF Radio System

### Repeater System

The Town of Somers seeks to purchase a UHF analog repeater system, for installation at the tower site located at 400 Main Street, Somers, CT.

The repeater system shall be comprised of the following principle parts:

**ICOM IC-FR4000 UHF Repeater** (450-480 MHz range), set to 35 watts maximum output to the antenna, and a **ICOM MB-78 19 inch Rack Mount Adapter**.

**Samlex America SEC-60BRM** 13.8 volt, 60 amp 19 inch Rack Mount N+1 Power Supply with meters and battery backup.

**Telewave TS450PB1** Dual Isolators with Harmonic Filter, including 35 and 50 watt loads, with "N" connectors throughout. Configured for 19 Inch rack mounting.

**Telewave TPRD-4544** Pass/Reject Duplexer, with "N" connectors, configured for 19 inch rack mounting.

**CommScope/Andrews AVA5-50** 7/8 Inch Heliax 50 Ohm Hardline with copper outer and inner conductors.

**PolyPhaser Coaxial Protector** with "N" Connectors – Type and model to be consistent with the grounding methods and practices in use at the transmitter site, and the repeater's operating frequency and output power.

**Telewave ANT450D3** Dual Element Dipole Antenna with minimum 3 dB gain.

**ICOM HM-152T** DTMF Hand Microphone

**Rack mount** or **Cabinet** configured and sized to contain the repeater, intermod panel, duplexer and power supply.

The successful provider will be responsible for supplying and integrating the specified components, and the installation of the repeater system and its antenna system at the designated site.

**Repeater System**  
(continued)

The quoted price should include all necessary mounting hardware, RF and electrical connectors, grounding equipment and hardware, and all necessary leads and interconnecting cables.

The backup battery shall be supplied by the Town.

The quoted price should include all labor associated with the installation of the repeater system and associated antenna system.

The call sign for the CW IDer and repeater frequency pair shall be supplied to the successful bidder.

<b>Year</b>	<b>Make</b>	<b>Model</b>	<b>Department</b>	<b>Type</b>	<b>Voltage</b>	<b>Mobil's</b>
1995	INT	4900	Highway	Plow/Dump/Sander	12	1
1997	INT	4900	Highway	Plow/Dump/Sander	12	1
1998	INT	4900	Highway	Plow/Dump/Sander	12	1
2001	INT	4900	Highway	Plow/Dump/Sander	12	1
2003	INT	7400	Highway	Plow/Dump/Sander	12	1
2005	INT	7400	Highway	Plow/Dump/Sander	12	1
2006	INT	7400	Highway	Plow/Dump/Sander	12	1
2008	INT	7400	Highway	Plow/Dump/Sander	12	1
2009	INT	7400	Highway	Plow/Dump/Sander	12	1
2012	INT	7500	Highway	Plow/Dump/Sander	12	1
2003	Ford	F550	Highway	1 Ton Dump	12	1
2004	Ford	F350	Parks	1 Ton Dump	12	1
1996	Ford	F350	Parks	Pickup	12	1
2004	Ford	F350	Highway	Pickup	12	1
2007	GMC	K3500	DPW	Pickup / Foreman	12	1
2008	Ford	F350	DPW	Utility / Mechanic	12	1
2002	Kenworth	T800B	Transfer	Roll-off	12	1
1994	INT	2674	Transfer	Roll-off	12	1
1993	Michigan	L-70	Highway	Loader	<b>24</b>	1
2004	Volvo	L-90E	Transfer	Loader	<b>24</b>	1
1989	Case	580	Highway	Backhoe	12	1
1995	John Deere	6200	Highway	Roadside Mower	12	1

# Town of Somers, CT

## UHF Radio System

### Mobile Radios:

22 Mobile Radios, Complete & Installed

@ \_\_\_\_\_ each = \_\_\_\_\_

### Portable Radios:

10 Portable Radios, Complete

@ \_\_\_\_\_ each = \_\_\_\_\_

### Garage Radio System:

Radio, Antenna System and Remotes,  
Complete and Installed

= \_\_\_\_\_

### Repeater:

Repeater and Antenna System per  
Specification, Complete & Installed

= \_\_\_\_\_

**Options:**

Portable Radio Batteries, each \_\_\_\_\_

Multi-Pocket Battery Charger with Power Supply, each \_\_\_\_\_

Portable Radio Leather Belt Hanger, each \_\_\_\_\_

Portable Radio Speaker Microphones, each \_\_\_\_\_

Portable Radio Vehicle Charger Bracket w/cord, each \_\_\_\_\_

Mobile DTMF Microphones, each \_\_\_\_\_

Mobile Radio External Speaker, each \_\_\_\_\_

# Town of Somers, CT UHF Radio System

**Proposal Submitted By:**

(Name) \_\_\_\_\_

**Representing:**

(Name of Firm) \_\_\_\_\_

(Street) \_\_\_\_\_

(City/State) \_\_\_\_\_

(ZIP Code) \_\_\_\_\_

(Phone) \_\_\_\_\_

(email) \_\_\_\_\_

**Prices are effective until:** \_\_\_\_\_

**Signature & Date:** \_\_\_\_\_

**Title:** \_\_\_\_\_