



COUNTY OF SAN LUIS OBISPO
DEPARTMENT OF GENERAL SERVICES

COUNTY GOVERNMENT CENTER • SAN LUIS OBISPO, CALIFORNIA 93408 • (805) 781-5200

DUANE P LEIB, DIRECTOR

**INVITATION TO BID # 3414-07
TONE ALERT RADIOS**

March 28, 2007

The County of San Luis Obispo is currently soliciting bids for Federal Signal Corporation "Informer" model Tone Alert Radios as noted.

Each bid shall specify each and every item as set forth in the attached specifications. Any and all exceptions must be clearly stated in the bid. Failure to set forth any item in the specifications shall be grounds for rejection. The County of San Luis Obispo reserves the right to reject all bids and to waive any informalities.

Please submit your bids on the attached form. They must be received at the office of the General Services Department no later than 4:00 p.m. April 19, 2007.

Any and all comments and suggestions are sincerely encouraged prior to the bid opening.

PHILL HALEY
Buyer - Central Services Division
phaley@co.slo.ca.us

F:\PUBLIC\2184\BIDSLONG\PH\Year 2007\3414bid.doc
H:\bids\3414-07.doc

TO: ALL PROSPECTIVE BIDDERS
SUBJECT: LOCAL BIDDERS PREFERENCE

The County of San Luis Obispo has established a local vendor preference. All informal and formal bids for contracts will be evaluated with a 5% preference for local vendors. Note the following exceptions:

1. Those contracts which State Law requires be awarded to the lowest responsible bidder.
2. Public works construction projects.

A "local" vendor will be approved as such when, 1) It conducts business in an office with a physical location within the County of San Luis Obispo; 2) It holds a valid business license issued by the County or a city within the County; and 3) Business has been conducted in such a manner for not less than six (6) months prior to being able to receive the preference.

As of March 3, 1994 individual County Buyers evaluate bids considering the local vendor preference described above. The burden of proof will lie with bidders relative to verification of "local" vendor preference. Should any questions arise, please contact a buyer at (805) 781-5200. All prospective bidders are encouraged to quote the lowest prices at which you can furnish the items or services listed in County bids.

	YES	NO
Do you claim local vendor preference?		
Do you conduct business in an office with a physical location within the County of San Luis Obispo?		
Business Address: _____ _____		
Years at this Address: _____		
Does your business hold a valid business license issued by the County or a City within the County?		
Name of Local Agency which issued license: _____		

Business Name: _____

Authorized Individual: _____ Title: _____

Signature: _____ Dated: _____

TO: ALL PROSPECTIVE BIDDERS

**SUBJECT: POLICY ON PURCHASING PRODUCTS MADE WITH OR CONTAINING
 CHLOROFLUOROCARBONS (CFC's)**

Summary

Many products contain chlorofluorocarbons (CFC's), a known depleter of ozone in the atmosphere. Under the U.S. Clean Air Act and the Montreal Protocol on Substances That Deplete the Ozone Layer, CFC production for use in industrialized nations is to be totally phased out by January 1, 1996. There are still many products on the market that contain CFC's or are made with CFC's. The Department of General Services, purchasing staff must identify products made with or containing CFC's and purchase alternative products whenever practical and possible.

Policy

To this end, it shall be the policy of the County of San Luis Obispo that all bidders, who wish to do business with the County are required to identify all products that contain CFC's or use CFC's in the manufacturing or shipping processes. Bidders are required to identify alternative products that do not use CFC's, for possible purchase by the County.

Bidder Response

	YES	NO
Do any products offered herein contain CFC's or use CFC's in the manufacturing or shipping process?		
If yes, please offer an alternative product by copying bid forms and submitting an alternate bid. Will you offer an alternate?		
Please provide any other information that may be helpful to the County. Attachments are acceptable.		

Bidder: _____

GENERAL CONDITIONS AND INSTRUCTIONS

1. All bids submitted by Seller to Purchaser should be submitted upon the attached bidder's form, completed and signed, (only typewritten or ink shall be accepted with no erasures or corrections unless properly authenticated by signature) in accordance with the instructions contained herein.
2. The issuance of this bid request creates no obligation on the part of the County and the County reserves the unconditional right at its option to either reject all bids or waive any irregularities or informalities therein. Each bid shall be in a separate sealed envelope with the bid number, name of bidder, title of the bid, date and time due showing on the outside of the envelope.
3. All prices must be firm for 45 days from the date of the bid opening and be inclusive. Upon award, prices will be in effect for the term of the contract.
4. Prompt payment discounts of 20 days or longer will only be considered when comparing bids, however, if you offer any prompt payment discounts, please indicate this on your bid.
5. Awards will be made to realize the greatest savings to the County and may not necessarily be the lowest bid especially where services are of the utmost importance.
6. Submission of a signed bid will be interpreted to mean that the bidder has thereby agreed to all conditions, instructions, descriptions and specifications contained herein.
7. All materials included in the contract shall be in compliance with all Federal and State OSHA laws.
8. All applicable City, State, and Federal taxes and fees are to be included in the proposal.
9. The only terms that will be honored are those terms included in general and special conditions and instructions, purchase order or other documents issued by the County.
10. In the event of any conflicts or ambiguities between these instructions and State or Federal laws, regulations or rules, then the latter shall prevail.
11. Only one bid will be accepted per vendor.
12. Bidders may withdraw their bid either personally, by written request, or by telegraphic request confirmed in the manner specified above at any time prior to the scheduled closing time for receipt of bids. No bidder may withdraw their bid after the time set for the opening.
13. All time limits stated are of the essence and must be complied with. Any bids received after closing time stipulated will be returned unopened.

14. All bids must be submitted in a manner so they can be readily hole punched and placed in a standard legal size file folder.
15. The County may make partial payments after a substantial portion of the merchandise has been delivered. On all items, a 10% retention will be withheld until all merchandise has been accepted.
16. Brand names are used to establish a level of quality only. Any alternates must be approved five (5) days prior to the bid opening date, by the County, who will have the sole right to determine this. If an alternate is submitted without going through the above- described process, the County will have the sole right to decide whether or not an alternate is acceptable.
17. Vendor agrees that it will not discriminate against any employee or applicant for employment because of race, color, religion, sex or national origin and that it will comply with the "Contractor's Agreements" provisions of Presidential Executive Order No. 11246.
18. **NO FAXED** Bids will be accepted.
19. Return bid by April 19, 2007 at 4:00 p.m. to:

COUNTY OF SAN LUIS OBISPO
DEPARTMENT OF GENERAL SERVICES
PHILL HALEY, BUYER
1087 SANTA ROSA STREET
SAN LUIS OBISPO, CALIFORNIA 93408

TONE-ALERT RADIO SPECIFICATION

GENERAL PRODUCT DESCRIPTION

The Tone Alert Radio (TAR) offered to meet this RFQ must be capable of simultaneously decoding multiple formats (single-tone, two-tone, DTMF, and optionally EAS or FSK Digital).

The TAR must be a robust radio receiver with a loudspeaker output designed specifically for warning applications. The unit must be capable of both wall mounting or sitting on a desktop and must include a rubber duck antenna that can be removed for connection to an outside antenna. The TAR must have a battery and charger to provide reliable operation even in the event of an AC power failure.

The TAR must be programmable with up to four separate warning tones plus a channel monitor function for live PA announcements. Two programmable relay outputs and a 600-ohm audio output must also be available. These outputs must be capable of controlling other equipment such as a strobe light for warning the hearing impaired or to tie into external PA systems.

The TAR must be capable of supporting up to four separate RF channels. The channels must be easily selected from the keypad.

The TAR must be completely programmable over a built in RS232 port from an easy to use Windows XP or 95/98® based software program. All data must be stored in non-volatile FLASH and EE memory. Using this technology, both the application software and the user specific configuration data must be capable of being updated over the serial port without the need to disassemble the unit or burn IC chips.

SPECIAL SMV (Standard Model Variation) FEATURE SET REQUIREMENTS:

In addition to the TAR SPECIFICATIONS listed in the next section, the following factory modifications (Special SMV) are required for this order:

1. Substitute sealed back speaker with "full range" speaker to improve audio fidelity. It is understood this may degrade the alert SPL output.
2. Reduce coast hold time on CTCSS decoder from the current 1 second to less than 200 mS. This is to reduce the annoying long squelch tail heard when the receive carrier goes away and the receiver is hearing co-channel interference or noise.
3. Add an audible beep or tone feedback while the volume buttons are depressed to indicate the level setting when using the up/down volume buttons to set the speaker receive level.
4. Center tune the receivers for peak sensitivity on 158.805 MHz for VHF and 453.200 MHz for UHF units.

5. All units will be ordered with the I/O relay & audio interface option.
6. Ship one VHF TAR incorporating the above SMV modifications to ITD-communications for review and approval prior to production run.

Ship to: Leland Armitage
ITD-Communications
1495 Kansas Ave
San Luis Obispo CA 93408

TAR SPECIFICATIONS

1. This RFQ is for a Quantity of 150 VHF and 30 UHF Tone-Alert Radios.
2. The Radio must support up to six activation codes include simultaneous decode capability of single-tone, two-tone, and DTMF standard with the option of also simultaneously decoding the National Weather Service Emergency Alert System (EAS/SAME) protocol or a FSK protocol.
3. The Radio must be available in VHF High Band (150-174Mhz), and UHF (450-470Mhz) frequencies. The radio receiver must be tunable across the entire band.
4. The Radio must be field programmable via a Windows based software program which allows configuration of radio frequency, Alert Codes, Tone and Digital coded squelch, Test LED, Speaker Timing, Audible Alarms, Monitor options, Relay Output, and Relay Timing.
5. The Radio must include two independently operated and programmable SPDT relays capable of controlling external devices rated up to 5amps @ 30VDC.
6. The Radio must also include a 600-Ohm adjustable balanced audio output capable of tying the radio into an existing PA system or other externally amplified speaker systems.
7. The Radio must be capable of producing a minimum sound pressure output of 85dB @ 10ft and should have the capability of adjusting the voice messaging volume from a high of 85dB to a low of 55dB at 10ft. The end-user should not be capable of disabling the speaker output.
8. Minimum of eight standard alert tones (Steady, Beep, Hi-Lo, and Warble or Soft Steady, Soft Beep, Soft Hi-Lo and Soft Warble)
9. The Tone-Alert Radio must operate from a 120VAC UL certified wall transformer and include a sealed lead-acid battery backup equal to 1 ½ hours of full alert tone sounding. The unit must include a continuous trickle charger and a low-battery cut-off to protect the battery. During a power failure, an automatic switch-over to battery operation must occur to maintain the Tone-Alert Radio's normal operation. Original and replacement batteries must be readily available from standard industrial suppliers.

10. The Radio must comply with all applicable government regulatory specifications, and be third-party listed to UL 1270 and must also comply with FCC Title 47, Part 15B.
11. Manufacturer must be ISO 9001 Certified.
12. Parts and service must be expedient and reliable.
13. The TAR must meet the following Radio Specifications:

- **Antenna Impedance** 50 Ohms, +/- 10 Ohms
- **Antenna Type** Rubber duck with swivel BNC connector

Frequency Range (MHz)	150 – 174*	450 – 470*
Intermodulation Rejection per EIA-603, part 4.1.9	≥ -75	≥ -70
Adjacent Channel Selectivity per EIA-603, part 4.1.6	≥ -75	≥ -70
Spurious Response & Image Rejection (dBm) per EIA-603, part 4.1.8	≥ -80	≥ -75
Frequency spread allowable without re-tuning (MHz)	Tunable across band	Tunable across band

To specify narrow band 12.5Khz – add “N” to Part Number (VHF / UHF)

- **Sensitivity - 12dB SINAD** ≤ .35 μ for 12dB SINAD per EIA-603, part 4.1.4
- **Decode Sensitivity** ≤ 0.5 μ V
- **Operating Current** < 100 mA. Standby
<400 mA. Max.
- **Battery Capacity** **Internal sealed Lead-Acid, capable of running for 6 hours in standby mode w/ 15 minutes of each hour generating siren beep audio at rated audio output, (Based on Pulsed Tone audio). Low voltage cutoff set to 5.38 VDC +/- 0.1 VDC.**
- **Operating Voltage** **8 to 15 VDC, Unit supplied with a 9 VDC, 500 mA. wall transformer with a 120 VAC, 60 Hz primary Center terminal is positive (+) on the DC connector.**
- **Hum and Noise** **-37dB when unscelched, -57dB scelched relative to full quieting signal w/ 1 kHz tone @ 3 kHz deviation @ rated audio out per EIA-603, part 4.1.11**
- **Audio Output** **1 Watt into 8 ohms**

- Audio Distortion < 5% @ 85dB output, w/1 kHz tone.
- Audio Sensitivity ≤ 30% of nominal system deviation (1.5 kHz minimum deviation to produce 85dB audio output level w/ volume control @ full per EIA-603, part 4.1.1.7)
- Electromagnetic Interference Compliant w/ FCC Title 47, Part 15B

TAR OPERATION

1. Monitoring

The TAR must be capable of being programmed to monitor the radio frequency of 158.805 MHz for the VHF model and 453.200 MHz for the UHF model.

Pushing the **MONITOR** button will place the TAR in monitor mode and allow the end-user to begin listening to the programmed channel. If multiple RF channels have been programmed into the TAR, the TAR will beep once for each channel number when the **MONITOR** button is pressed. For example, the first time the **MONITOR** button is pressed the TAR will beep once for channel 1. The second time it is pressed, it will beep twice for channel 2, etc.

The TAR must emit a short tone to alert the user after a valid **ALERT** message is received. The speaker must open up to allow a voice announcement to be heard.

To discontinue monitoring and place the unit in standby mode, the end-user presses the **RESET** button on the TAR. While in standby, the TAR will not be heard but will continue to monitor the selected NOAA radio channel for emergency broadcasts.

2. Receiving an Alert Message

Whenever the TAR receives a valid **ALERT** Message, the Red **ALERT** LED must flash and sound the programmed alert tone. The TAR must enter Monitor mode to enable the user to hear radio traffic over the TAR. The length of the tone and automatic Monitor mode reset must be programmable.

The TAR must receive ALL properly addressed **ALERT** messages sent over the radio whether the TAR is in Monitor mode or standby mode.

The TAR must automatically reset and return to standby when the control center sends a **CANCEL** command or after a default timeout. The Red **ALERT** LED must remain lit until you press the **RESET** button to acknowledge the alert.

3. Receiving a Test Message

If the TAR has been programmed with a **TEST** function, the yellow **TEST** LED must light steady whenever a Test Message has been received. This light must remain on until the **RESET** button is pressed.

4. Volume Control

The TAR must offer the ability to control the sound volume of voice messages heard over the TAR speaker. The Alert beep volume should not be adjustable. The TAR should include **VOLUME** ↑ and **VOLUME** ↓ buttons for increasing or decreasing the volume. Holding down either arrow should allow the end-user to "scroll" to the highest or lowest volume levels.

Holding down the **MONITOR** button for over 5 seconds should open up the radio squelch and allow noise to be heard over the speaker if no radio traffic is present. The **RESET** button should return the TAR to standby.

5. Tone-Alert Radio Failure

In the event of unit failure, the yellow **TEST** LED light must flash once per second and the unit must emit a beep every 30 seconds to inform the user of the failure mode.

WARRANTY

The seller must warrant the Tone-Alert Radio from the date of receipt for a period of not less than one (1) years for defects in electrical components, and mechanical components when adequately maintained in accordance with instructions.

PAYMENT

Payment for equipment shall be made within 30 Days of invoice.

REFERENCES

All responding bidders shall provide a minimum of 5 users of the proposed product.

INTENTIONS

These specifications are not intended to include any proprietary items, components, circuits, or devices which would preclude any outdoor warning siren manufacturer from producing equipment to meet these specifications. All ratings, power outputs, and specific criteria are currently being met by commercially available equipment. The fact that a manufacturer chooses not to produce equipment to meet these specifications, providing the above criteria is met, will not be sufficient cause to adjudge these specifications as restrictive.

EXCEPTIONS

All bidders must meet the **TAR REQUIREMENTS**. Bidders must note any exception to the specifications and indicate those specific exceptions to the bid in a letter accompanying the bid at the time of the bid opening.

RESERVATION OF RIGHTS

The County of San Luis Obispo reserves the right to reject any or all bids and to waive any formalities or technicalities in any bid received without explanation

The undersigned agrees to:

Deliver F.O.B. itemized below, and in accordance with Specifications attached. All equipment to be new and unused of the latest model year and all attachments shall be designated to be compatible with equipment proposed.

All equipment and accessories shall comply with the applicable State and Federal Codes, Regulations and Requirements.

Equipment shall be delivered serviced and ready to operate.

Description of proposed equipment:

Year of Mfg. _____ Warranty _____

DESCRIPTIVE LITERATURE WITH COMPLETE SPECIFICATIONS MUST ACCOMPANY ALL BIDS. DEVIATIONS TO ATTACHED SPECIFICATIONS MUST BE CLEARLY INDICATED. NO DEVIATIONS UNLESS SPECIFIED IN SPECIFICATION SHEET OR BELOW.

Item	Qty	Description	Unit Price	Unit Total
1	150	VHF Model I-H IO incorporating special SMV		
2	30	UHF Model I-U IO incorporating special SMV		
3		7.25% Sales Tax		
4		Grand Total		

TERMS OF SALE _____ DATE OF DELIVERY _____

Authorized Official Name (Print) _____

Authorized Official Title (Print) _____

Signature _____

Firm Name _____

Address _____

City _____ State _____ Zip Code _____

Telephone _____ FAX _____

Federal Taxpayer ID# _____

- Individual/Sole Proprietor
 Corporation
 Partnership
 Other

BIDS MUST BE RECEIVED BY 4:00 P.M. APRIL 19, 2007 AND
WILL BE OPENED IN THE OFFICE OF THE CENTRAL SERVICES MANAGER
Bid #3414-07