

AN ORDINANCE TO AUTHORIZE THE DIRECTOR OF PUBLIC SERVICE TO ADVERTISE FOR BIDS AND THE MAYOR AND DIRECTOR OF FINANCE TO ENTER INTO A CONTRACT FOR THE PURCHASE OF ONE (1) TELEMETRY UNIT. *AND DECLARING AN EMERGENCY*

Be It Ordained by the Council of the Village of Richfield, Ohio:

- Section 1: The Director of Public Service is authorized to advertise for bids for the purchase of one (1) telemetry unit in accordance with plans and specifications now on file with such Director of Public Service.
- Section 2: The plans and specifications for the telemetry unit referred to in Section 1 are hereby approved.
- Section 3: The Mayor and Director of Finance are authorized and directed to enter into an agreement for the purchase of the telemetry unit with the lowest and best bidder after advertising according to law.
- Section 4: This Ordinance is determined to be an emergency measure necessary for the immediate preservation of the public peace, health, or safety for the reason to purchase equipment for vital municipal purposes and provided this Ordinance receives the affirmative vote of two-thirds of the members elected or appointed, it shall take effect and be in force from and after its approval by the Mayor; otherwise it shall take effect and be in force from and after the earliest date provided by law.

Passed:
10/7/86

David W. Howard

President of Council

E. June Feiber

Mayor

Dated: 10-7-86

Attest:

Nancy L. Hegley

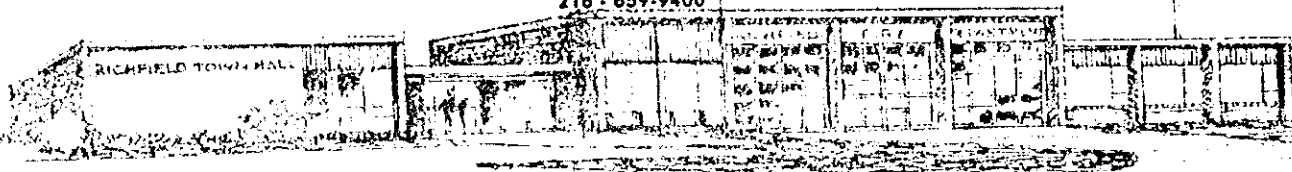
Clerk of Council

Richfield Fire Department

Chief, RUSSELL ENGLISH

P.O. BOX 387
4410 W. STREETSBORO ROAD
RICHFIELD, OHIO 44286-0387

216-659-9400



SPECIFICATIONS FOR EMS VEHICULAR REPEATER

GENERAL

EMS mobile repeater specification for two-way simultaneous retransmissions of two different radio frequencies received using two separate receivers.

MOBILE RADIO GENERAL DESCRIPTION

Vendors shall propose mobile radio(s) meeting the following functional requirements;

1. Be capable of transmitting on ten (10) different frequencies.
2. Be capable of receiving on ten (10) frequencies (8 MED, 2 dispatch) with basic radio receiver and on a minimum of four (4) additional frequencies when the second receiver is utilized.
3. Radio must have provisions for control from one position within vehicles.
4. Radio must be full duplex with multiplex operation. radio shall provide capabilities to modulate and amplify ECG signals from input jack on control unit located in patient compartment. Multiplex ECG modulator function may be energized by push button on radio control module.
5. The mobil shall be a bi-directional (two-way simultaneous) vehicular repeater, defined as a mobil capable of simultaneous reception of two specific channels from two groups of frequencies in the 458 MHz and 463 MHz ranges. Upon reception signals over one or both of these receivers, combined audio will be automatically retransmitted on one of a specific group of 468 MHz frequencies.

The combining of the audio from two receivers shall produce an overlay of two intelligible transmissions. The resulting retransmissions or repeated messages will result in a full duplex transmission. In addition, multiplexed ECG telemetry signals from personal portable unit associated with the vehicle repeater shall be processed through the vehicular repeater so that its reception at a display point shall not be degraded by the simultaneous combinations of audio received by the 458 MHz and 463 MHz receivers. The radio signal paths of the mobil and associated portables shall be: portable-to-mobil-to-base and

base-to-mobil-to-portable.

The selection of channels for the 456MHz and the 463 MHz frequencies shall be provided by switch control.

6. When operating with two receivers, the option to change the method of repeater to give priority to either receiver shall be accomplished by jumper options. When priority is utilized radio will only repeat one receiver's signal at a time. Jumper options shall be as follows:
 1. No priority both receivers can repeat together.
 2. 463MHz receiver has priority.
 3. 458 MHz receiver has priority.
 4. First receiver enabled has priority.
7. When radio is supplied initially with only one receiver it shall be capable of being converted to a two receiver model by only adding the second receiver conversion kit, cable and connectors. Conversely should a two receiver model be purchased initially, it may be converted to a single receiver model by unplugging the auxiliary receiver. When operating with one receiver, radio will retain capability to operate as a repeater. When operating with one or two receivers with or without the rear control unit, control positions will have full duplex capabilities. In mobiles with only one receiver, a portable associated with the mobile and working through the mobile for its link to and from the base station will provide a simplex talk path.
8. The mobile radio will utilize CTCSS on all channels. The receive CTCSS tone may be disabled for standard squelch reception. Eight transmit CTCSS tones will be provided on transmit.
9. All mobiles will be supplied with a single 5 dB gain antenna.
10. An operator's guide shall be provided explaining operation of unit in layman's terms.
11. One modem 100 digital readout encoder

FRONT CONTROL

The front control shall have available the following function controls and accessories:

1. On/off power switch.
2. Squelch control adjustable by radio operator.
3. Repeater enable/disable switch.
4. RF frequency selector switch to select one of ten frequencies.
5. A CTCSS receiver disable switch.
6. Duplex handset.
7. An 8 tone (min.) CTCSS encoder for transmit using a separate pushbutton CTCSS selector.
8. A switch to allow repeater operation without CTCSS.
9. Transmitter on indicator light.

PHYSICAL REQUIREMENTS

Installation of a vehicular repeater with one or two receivers shall not require any vehicle modifications other than those associated with normal mobile installations. Unit should be capable of mounting in either the driver or passenger compartment.

DETAILED TECHNICAL SPECIFICATIONS

Transmitter frequency capability:	10 Channels
Power output:	30 watts minimum (after duplexer)
Power input:	12 VDC, negative ground
Frequency stability:	$\pm .0005\%$ (-30° to $+60^{\circ}\text{C}$) ($\pm .0002\%$ optional)
Audio distortion:	less than 3%
Spurious & harmonics:	-60 dB below 60% max.deviation
Receivers:	463 & 458 MHz
Basic model:	463 MHz, 10 channels
Auxiliary receiver:	458 MHz, 4 channels
Frequency Stability:	$\pm .0005\%$ ($\pm .0002\%$ optional)
Selectivity:	-90 dB EIA SINAD
Intermodulation:	-80 dB EIA SINAD
Spurious & Image rejection:	100 dB w/transmit unkeyed 85 dB w/transmit Keyed.
Sensitivity:	.5 uV 20dB quieting .35 uV EIA SINAD
Audio output	10 watts at less than 5% distortion.

POSTING CERTIFICATE

I, Mary Higley, Clerk of Council of the Village of Richfield, Summit County, Ohio, do hereby certify that the following Ordinance-Resolution was duly passed by the Council of the Village of Richfield, Summit County, Ohio, on the 7th day of October, 1986, that there is no newspaper publication in the municipality and that publication of the following ~~Ordinance-Resolution~~ No. 46-1986 was made by posting true copies thereof at six (6) of the most public places in said Village as heretofore determined by Council.

1. Constantine Garden Center, 2518 Brecksville Road
Richfield, Ohio
2. Richfield Dairy Queen, 4815 Brecksville Road
Richfield, Ohio
3. Country Counter, 4428 Broadview Road
Richfield, Ohio
4. Richfield Library, 4400 W. Streetsboro Road
Richfield, Ohio
5. Vann's Drug Store, 3939 Broadview Road
Richfield, Ohio
6. Richfield Town Hall (corridor), 4410 W. Streetsboro Road
Richfield, Ohio

Each for a period of fifteen (15) days commencing on the 10th
day of October, 1986.

Mary L. Higley
Mary L. Higley, Clerk of Council
Village of Richfield, Ohio