I. Transmitter Technical Characteristics -- Pursuant 2.983 (d)

A. Specific Operating Power Levels:

RATED: 20 to 40 Watts, variable

MEASURED: Refer to Exhibit 7A

Maximum Power Rating: 40 Watts

Means provided for variation of operating power:

Output power is continuously variable over the range of 20 to 40 Watts. The output power is field programmable to any power level within this range.

B. Frequency Range: 806 to 821 MHz (Conventional operation)

851 to 866 MHz (Talk-around mode operation)

C. **Frequency Stability:**

RATED: ±0.00025%

MEASURED: Refer to Exhibits 7H and 7J

D. Types of Emissions:

16K0F1D, highspeed trunking data
16K0F3E, programmable per channel

E. Spurious Emissions:

RATED: 50 μW (-13dBm) maximum that corresponds to -56 dBC at the 20 Watt setting, and –59 dBC at the 40 Watt setting.

MEASURED: Refer to Exhibits 7F and 7G

F. DC Operating Voltages and Currents of the Final Stage:

10.8 Vdc to 16.32 Vdc and 10 A maximum

II. Transmitter Application

The following features, options, accessories, and installations characterize the transmitter.

A. Power Supply: Vehicular battery

B. Antenna: External 50 Ω antenna

Roof mounted ¼ Wavelength (unity gain)
Roof mounted 3-dB gain
Roof mounted 3-dB gain with Teflon cable

C. Squelch Types:

1. Carrier Squelch (CSQ)
2. Continuous Tone Coded Squelch System (Tone Private Line [TPL])
3. Continuous Digital Coded Squelch System (Digital Private Line [DPL])
4. Trunking Data

Description (continued)

D. Microphones Available:

HMN1056	Compact Microphone
HMN1035	Heavy Duty Microphone
HMN3013	DTMF Microphone
HMN3000	Desk Microphone

E. Maximum Transmit Channel Capability:

10 channels in conventional systems and 20 channels in trunking systems

F. Housing Style:

The transceiver circuitry is contained on a single, multi-layer printed circuit board (PCB). The PCB is enclosed in a cast metal chassis as shown in the accompanying photographs. The chassis serves as a heatsink for transmitter power amplifier devices and the regulators and audio power amplifier of the transceiver. A plastic cover with an integral shield (shield/cover) encloses the top of the chassis. The shield/cover is a removable to allow servicing.

The transmitter circuitry is on the PCB of the transceiver. The transmitter frequency generation circuitry is within metal shields that are soldered to the PCB. The low level power amplification of the transmitter circuitry is also contained under metal shields that are soldered to the PCB. The power amplifier stages are shielded form the other transceiver circuits by metal shields that are soldered to the PCB.

G. Available Accessories

GKN6271	Ignition Switch Cable
GLN7317	Non-Locking Bracket
FSN5510	7.5 Watt External Speaker
GKN6272	External Alarm Relay and Cable
HLN3067	Control Station Package

H. Programmability:

Programming is accomplished by the use of an IBM PC computer or equivalent, a Radio Interface Box, and Radio Service Software. Adjustment of the transmitter, including programming of the channel frequencies, output power adjustment, frequency adjustment, and deviation adjustment are performed in this manner.

NOTE: The transmitter is NOT programmable by the operator.