

ANALYSIS OF OLD & NEW RULES & REGULATIONS FOR
THE GENERAL MOBILE RADIO SERVICE (GMRS)
AND NETWORKED (LINKED) REPEATERS

By P. Randall Knowles, J.D., KAA 8142

Approach to reviewing new version of FCC Rules for GMRS. We all have our own predispositions and preferences what we think should be the nature of operation in GMRS. However, as is commonly the case when lawyers seek to interpret regulatory language, one should look at the commonly understood meaning of the actual language involved, including, in this case, all of the various relevant sections of the Rules in Part 95. Looking outside of the 4 corners of the GMRS Rules themselves for FCC intent is only justified if there is inherent ambiguity in the actual regulatory language.

Remote Control. The FCC Rules for GMRS have authorized “Remote Control” of GMRS Base (including “repeater”) stations for many decades. But this has been limited by the FCC, more recently starting in 1978, when the Commission acted to change the Rules to absolutely ban telephone interconnection.

The background of this action began in August 1977 at the REACT International Convention in Dallas Texas. When Dallas area REACT groups attempted to set up a repeater, it was discovered that a local radio shop had set up repeaters on all 8 channels with telephone “autopatch”. This totally usurped all of GMRS in the area for one radio shop’s mobile telephone operations. It took action by the FCC’s Field Operations Bureau to end this abuse, but the action was made more difficult because there was no specific GMRS rule preventing “autopatch”. (Note, my own repeater was equipped with autopatch, which I had to remove in 1978.) In the new Rules (effective September 28th, 2017) the telephone ban is contained in the first sentence of §95.1749.

Remote control has been addressed in the GMRS Rules for well over 50 years. The old Part 95 provision was in §95.75 Control points, dispatch points, and remote control. In 1983 the FCC made major changes to and reorganization of the GMRS Rules. Observing that the provisions had remained virtually unchanged since 1958 and had become obsolete due to “advances in technology”, the FCC further limited remote control in PR Docket 82-84 (48 FR 35233 et seq., August 3, 1983). The following language was added in §95.127:

§95.127 Controlling a station from a remote point.

(a) A station operator in a GMRS system may control the station from a remote point through a control link (a connection between the remote control point and the remotely controlled station). The control link must be either:

(1) A wireline control link solely for purposes of transmitter control (see § 95.181(i)(13)); or

(2) A radio control link.

(b) The remotely controlled station must not make unauthorized transmissions.

(c) The station operator must perform the required duties (see §95.173) when controlling the station from a remote point the same as when controlling it locally at the station point. Should the control link fail to function so that the station operator cannot perform the required duties, the remotely controlled station must not transmit.

(d) The FCC does not consider a station in a GMRS system as being remotely controlled if the connection is a wireline or mechanical control link, and the station and its control point are both:

(1) On the same vehicle; or

(2) At the same street address, or within 152 meters (500 feet) of each other.

(e) Any device used to establish a wireline control link which is attached to the public switched telephone network after April 1, 1976 must be registered with the FCC and must comply with the standards incorporated in a registration program to protect the public switched telephone network from harm (see part 68 of the FCC Rules)."

The phrase "solely for purposes of transmitter control" was clearly a **limiting** factor on remote control. Note, at the same time the Rules were also further amended by adding language to §95.181(i)(13) prohibited communications:

(13) Messages which are both conveyed by a wireline control link and transmitted by a GMRS station (see § 95.127);

Based on these added provisions I therefore conclude that the language "solely for purposes of transmitter control" in the original §95.127(a)(1) did not allow **audio** to be transmitted via a wireline control link. If audio were permitted, messages would be transmitted. What, then does the phrase "solely for purposes of transmitter control" include? Turning the power on or off, or otherwise disabling the transmitter is obviously included. So would remotely enabling or disabling a particular subaudible tone for transmit or receive.

While §95.127 was deleted February 12, 1999, in the adoption of the new Universal Licensing System (ULS), the nearly identical phrase "for the sole purpose of operation by remote control" continues in the new Rules at §95.1749. And the prohibited communication language above remains especially important because the FCC explicitly **declined** to delete it in the new version of the Rules. In paragraph A.8. of the Report and Order just released in WT Docket 10-119, the Commission flatly stated:

...The Commission also declined to change or clarify the rules regarding network connections in the GMRS Rules. Finally the Commission declined to delete the GMRS prohibition on messages that are both conveyed by a wireline control link and transmitted by a GMRS station. In each of these instances, the late filed comments generated insufficient record to make a determination on the requests and evaluate the impact of the requests if allowed.

Traditional remote control units marketed by land mobile radio manufacturers that utilized tone signaling with DC and/or AC for transmitter keying are clearly barred by this language. This is true even though they employed leased private telephone company circuits **not** part of the public switched network and not accessible via any telephone number. This traditional outright ban continues in new §95.1733(8), which explicitly bars "Messages which are both conveyed by a wireline control link and transmitted by a GMRS station;"

Note further that §95.1749 of the new rules (GMRS network connection) applies both to "the public switched network **or other networks.**" This reference to *other networks* must be given some additional meaning, the most obvious example being the Internet. I therefore conclude that the Internet is encompassed by the additional limiting language in §95.1749, "for the sole purpose of operation by remote control". Using the Internet, PBX software, etc. to send

audio communications output by a GMRS transmitter is not “for the sole purpose of” remote control and is thus prohibited by the FCC Rules.

“Operate”. New §95.1745 includes the phrase “operated by remote control” and §95.1749 “operation by remote control”. “Operate” is defined in new §95.33 thus:

Control the functioning of a Personal Radio Service station; in particular, cause a Personal Radio Service station to begin, continue, *or* cease transmitting.”

Emphasis added.

Therefore the definition of operate is consistent, and does not conflict with, the limited meaning discussed above “solely for purposes of transmitter control” and the ban on “messages” by wire-line control. A prime principal of law is that regulatory language should be interpreted to be consistent and not conflicting, if possible.

Personal opinion. I began this examination of the FCC Rules by observing that one must put aside his own personal preferences what the Rules should be, and stick to the clear meaning of the language employed. I have done so even though the result bars things I would strongly prefer the Rules would permit. For example, I have long advocated remote receiver linking in GMRS. Most personal systems cannot pay the very high costs of locating repeaters on the tallest, most advantageous antenna sites. Remote receiver linking would enable repeater systems located on lower sites to, none-the-less, to have good receive range and/or portable fill-in coverage. The Internet appears to be one of, if not the most attractive options to accomplish such a significant improvement. But, given the current language of the Part 95 Rules, I reluctantly must conclude that such a solution would be in clear and direct violation of the GMRS Rules as they now stand, and will continue to provide, starting September 28th.

Background of writer. I currently hold the oldest GMRS call sign issued to an individual in the United States. I submitted extensive Comments, Reply Comments, and an ex-parte live presentation to FCC staff in Washington, D.C. in FCC WT Docket 10-119. My publically filed comments described my experience thus:

These comments are submitted by P. Randall Knowles. My experience in two-way radio dates back to 1960 when I first became involved in Citizens' Band (Class D CB) Radio (KPJ 1093). I have worked as a public safety dispatcher (both police and fire), a mobile telephone operator (Domestic Public Land Mobile Radio Service, predating cellular) and subscriber (KW 9598), and American Red Cross Disaster Representative (Special Emergency Radio at 47.42 MHz). I have held other FCC licenses in the Class B Citizens' Radio Service (KAN 0682), the Class A Citizens' Radio Service (now GMRS) (KAA 8142), the Experimental Radio Service (KK2XHV) and Marine Radio (WAD 7985 and currently WDB 4290). I have been an active GMRS user since 1970 and a GMRS repeater operator since 1971. I first became a mobile telephone subscriber in 1969 and have utilized cellular since 1986, when transportable equipment first became available in the Chicago area.

My background further includes service as a criminal prosecutor with the Lake County (Illinois) State's Attorney's Office and over 25 years experience as a municipal prosecutor in Cook and Lake Counties, Illinois. I have served for many years and am currently a member of the Emergency Telephone System Board (which funds 911) in my community. I am a past Red Cross Disaster Communications Chairman (North Region, Mid-America Chapter) and founding member of North Shore Emergency Association (a public service and emergency personal radio organization) and Steering Committee Communications Lead for the Illinois Chapter, National Multiple Sclerosis Society. I served as Rule Readability Task Area Chairman of the FCC's Personal Use Radio Advisory Committee (PURAC) some 25 years ago.

My experience in GMRS of over 40 years includes directly assisting some 3 to 4 dozen groups in over 25 states to set up their own repeater systems and obtain proper licensing. I assisted several dozens of personal GMRS users to obtain licenses from the Chicago Regional Spectrum Management Center when that facility was in control of GMRS licensing in this area with its complex application (Form 425) and extensive technical information requirements. My wife and I routinely take GMRS radios with us when traveling, and I have first hand personal GMRS operating experience in 28 states in the last year and a half alone.

Respectfully submitted, P. Randall Knowles, KAA 8142.