

October 26, 1990

Mr. Frank Wright
Chief, Frequency Liaison Branch
Office of Engineering and Technology
Federal Communications Commission
2025 M Street, N.W., Room 7332
Washington, DC 20554

Dear Mr. Wright:

Pursuant to Section 5.202(d) of the Commission's rules, Motorola, Inc. requests a new nationwide experimental license to test and demonstrate new, spectrally efficient modulation schemes for Cellular Radiotelephone systems per the attached FCC Form 442. This testing and demonstration will be performed in the existing Domestic Public Cellular Radio Telecommunications Service frequency bands (824 to 849 MHz and 869 to 894 MHz) and either in conjunction with local system operators (existing cellular licensees) or using specially configured transceivers having reduced output power, etc. to avoid interference to operating systems.

Since the proposed equipment is prototype in nature and standards are not yet in place for these new modulation methods, type approval for the equipment is not yet attainable and, as such, requires an experimental license. The grant of such a license will allow us to perform the tests and demonstrations and further the develop the new technologies involved.

We are requesting that the license be granted for nationwide operation to allow testing in all cellular markets without having to burden the Commission with multiple requests for individual experimental licenses as tests will be performed with various cellular licensees. A relocatable demonstration system is also proposed that would be operated at trade shows or customer sites throughout the country.

The resulting occupied bandwidths for the new modulation schemes in the proposed experimental license will not exceed the current maximum authorized bandwidth of 40 kHz for the present service. The equipment to be used (although under continuing development) is expected to conform to all other technical standards applicable for operation in the Domestic Public Cellular Radio Telecommunications Service.

In Docket No. 79-144, the Commission categorically excluded regularly licensed mobile and microwave systems from routine environmental processing concerning radio frequency (RF) radiation. While experimental actions were not categorically excluded, the facilities requested in this application are of a similar nature to regularly licensed systems and should not exceed the ANSI standard used by the Commission for public exposure to RF radiation.

Please call me at (717) 334-0921 if you have any questions or when the authorization is ready so I may pick it up at your office.

Sincerely,



Al Ciampaglia
Manager
Motorola Liaison Office