



COUNTY OF LOS ANGELES
Internal Services Department
1100 Eastern Avenue
Los Angeles, California, 90063

JOAN OUDERKIRK
Interim Director

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August 9, 1999

To: Federal Communications Commission
Office of Engineering and Technology
Experimental Radio Service

From: Richard Granado, Division Manager
Radio Systems Division

Subject: **APPLICATION FOR AIRBORNE MICROWAVE DOWNLINK VIDEO
EXPERIMENTAL LICENSE**

The County of Los Angeles is submitting the attached application FCC Form 442 for an experimental radio license authorized under Part 5 of the FCC rules. The County will be testing downlink video for police and fire tactical operation in an underutilized 2402 to 2448 MHz band spectrum.

Enclosed along with the application is additional information furnished to satisfy items "10" and "11" on Form 442.

Exhibit A – A complete program description of experimentation, description of equipment and theory of operation, objective sought to accomplish and anticipated experiment schedule.

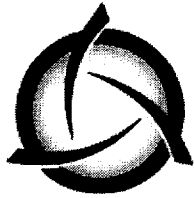
Attachment 1 - Diagram of Proposed System – County Airborne
Video

Attachment 2 - Example of Existing Broadcast Network in
Southern California

Attachment 3 - 2380 to 2450 MHz Spectrum Signal Radiation
Report

Attachment 4 - Compliance Statement from Equipment
Manufacturers

Should you have questions regarding this matter, please call Gary Poon of my engineering staff at (323) 267-3004.



ADAPTIVE BROADBAND

<http://www.adaptivebroadband.com>

June 25, 1999

Mr. Jesse P. Loera
Los Angeles County Sheriff's Department

Dear Jesse,

I've been asked to elaborate on the capabilities of the microwave central receiver that Wescam is planning to furnish as part of the overall system.

We understand you are planning to use the 2.4-2.45 GHz Government/Amateur band for operation in addition to your existing 2.48 GHz licensed channel (A08). The MCR Central Receiver will support operation from 1.9-2.7 GHz. Due to reduced signal bandwidth requirements (10 MHz channels), lower than standard deviation (3 MHz Vs 4 MHz) will be used. The MCR receiver has sufficient video sensitivity to produce a 1-volt peak-to-peak output level at this deviation level. Tighter IF filters will be employed which will provide slightly better sensitivity than usual. The highest subcarrier to be used is 4.83 MHz which is already a standard with this product. Video signal-to-noise ratio will be 66 dB or better with a -40dBm received carrier level.

The MCR receiver can be programmed at the Factory to any 10-channel frequency plan in the 1.9-2.7 GHz band.

Adaptive Broadband, formerly California Microwave – MRC is the leading supplier of fixed and remote pickup video microwave in the world. Please let us know if there is any additional information that you need. We look forward to working with you and Wescam on this project.

Regards,

Carl Guastaferrro
Western Regional Sales Manager
Adaptive Broadband – MRC Products Group

Cc: Mark Merrill, Wescam



Global Microwave Systems, Inc.

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June 16, 1999

Mr. Jesse Loera
Communication Technician
Los Angeles County Sheriff's Department
1277 North Eastern Avenue
Los Angeles, CA 90063

Dear Mr. Loera

This letter is to confirm that GMS standard radios, STS transmitter and SRS receivers, are capable of supporting the experimental license that is applied for by the Los Angeles County Sheriff Department.

As described in our product catalog the ST and SR series radios are microprocessor controlled. All major functions like Channel select, HI / LOW / Standby power select, Video and Audio levels are controlled via the microprocessor. These controls are accessed locally via the touch pad or remotely through the RS -232 link.

The microprocessor enables us to add features that are unmatched by other products. For example we can program the radios to have unlimited number of channels, multiple frequency bands with preset video and audio levels.

Since the ST and SR series radios are capable of operating in the 2.0-2.7 GHz band standard, we can easily program the required frequencies (2400-2450) and the required deviation bandwidth (10 MHz) that are proposed for the experimental license. Of course the 10 MHz bandwidth allows for only one Audio Subcarrier at 4.83 MHz.

Furthermore, if required, we can program the current frequencies and video levels (modulation bandwidth), under a separate frequency plan, in the same radios. Then the user can easily select the band to operate on simply by selecting the proper frequency plan. For a more detailed explanation, please refer to our ST series Operational Manual.

The SR series receivers also incorporate a selectable IF (SAW) filter as an option. This feature will allow for two different bandwidth IF filters which will provide for better rejection for adjacent channels. For the proposed experimental band the narrow band (14 MHz) IF filter will be selected. For the traditional frequency band the standard IF (22 MHz) filter will be used.

Global Microwave Systems, Inc. is a full service engineering and development company. GMS manufactures miniature and sub-miniature transmitters and receivers specifically for investigative , surveillance, and security applications and maintains a high degree of expertise in the core business ; development and production of microwave /RF related devices and video collection systems, specialized concealment, and remotely-controlled surveillance equipment.

Our mission is to understand and meet the unique need of all our customers by emphasizing on integration of complex technologies to create complete and refined communications systems.

GMS will be proud to support LASD and the LA Law Enforcement community in their quest to attain access to operate in the 2400-2450 MHz band.

Sincerely,

Sam Nasiri,
President, Global Microwave Systems Inc.