

R&E

ROBERTS & ECKARD, P.C.

ATTORNEYS AT LAW

1150 CONNECTICUT AVENUE, N.W., SUITE 1100
WASHINGTON, D.C. 20036

JAMES S. BLITZ
JOY R. BUTLER
PAMELA C. COOPER
LINDA J. ECKARD
KENNETH M. KAUFMAN
MARY L. PLANTAMURA
LAWRENCE ROBERTS
PETER D. SHIELDS
MARK VAN BERGH*

*OF COUNSEL

**ORIGINAL
RECEIVED**

AUG 23 1995

**FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY**

TELEPHONE
(202) 296-0533

TELEFAX
(202) 296-0464

August 23, 1995

Mr. H. Franklin Wright
Spectrum Utilization and Economics Branch
Office of Engineering and Technology
Federal Communications Commission
2000 M Street, N.W., Room 230
Washington, DC 20054

Re: Experimental Station KI2XIE
Corbin City (Atlantic City), New Jersey
File Nos. 4264-EX-PL-94 and 4426-EX-ML-94

Dear Mr. Wright:

Transmitted herewith, on behalf of Orion Broadcasting Systems, Inc. ("Orion"), is the fifth status report required pursuant to a condition placed on the above-referenced Experimental Station license.

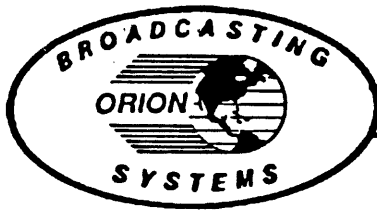
Should further questions arise in connection with this matter, please communicate directly with the undersigned.

Very truly yours,



James S. Blitz
Counsel to Orion Broadcasting
Systems, Inc.

Enclosure



2700 E. Sunset Road, Suite A-12, Las Vegas, NV 89120

702-597-9875

800-356-1825

Fax: 702-597-0908

RECEIVED

AUG 23 1995

**FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY**

August 16, 1995

Federal Communications Commission

1919 M Street NW

Washington D.C. 20554

Dear Sirs:

We respectfully submit the following test results that were performed pursuant to experimental licenses granted to Orion Broadcasting Systems of Absecon, NJ. If you have any questions regarding these tests please contact Michael Myers of Orion Broadcasting Systems at (609) 485-0099 or Martin Frankel of Decathlon Communications, Inc. at (303) 755-7292.

MMDS ADJACENT CHANNEL TESTING IN ATLANTIC CITY, NEW JERSEY

Purpose of the tests

To subjectively evaluate the effect of a 64 QAM digital signal on adjacent channels in the MMDS and ITFS frequencies.

Federal Communications Commission

August 16, 1995

Page 2

Test location

Atlantic City, NJ in the service area of Orion Broadcasting Systems. See the map attached hereto as Exhibit A which identifies the transmit site and receive locations.

Participants

Orion Broadcasting Systems

Decathlon Communications, Inc.

Test method

A 64 QAM digital signal was transmitted from the head-end using the equipment set-up attached hereto as Exhibit B. The effect of this signal on the standard NTSC signals on the adjacent channels was observed at the receive sites. Attached hereto as Exhibit C is Orion's channel configuration used for the testing.

Test results and conclusion

The results of the tests are attached hereto as Exhibit D. The digital signal employing the Decathlon filtering system showed no visual effect on the adjacent analogue signals at power

Federal Communications Commission
August 16, 1995
Page 3

levels up to 120% of normal. The Decathlon filtering system met and exceeded FCC specifications.

Discussion

In digital transmission the question is not whether you can transmit a video picture within the given 6 MHZ bandwidth and meet the FCC interference regulations but how many bits of data you can fit into the 6 MHZ bandwidth which is filtered to assure that you meet the interference regulations. The number of bits that you can deliver will determine the number of programs that can be delivered, so be it. In short, the issue of complying with interference standards is the design and effectiveness of the bandpass filter and not the design and operation of the modulator or transmitter.

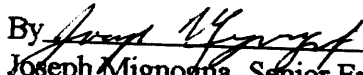
If a bandpass filter of proper design is employed, the interference standards will be met and as discussed later, approximately 33 Mbits/sec. Of data can be delivered using 64 QAM modulation, allowing the delivery of between 10-15 programs. Furthermore, using a proper bandpass filter allows the use of unchanged type accepted transmitters. These tests proved

Federal Communications Commission
August 16, 1995
Page 4

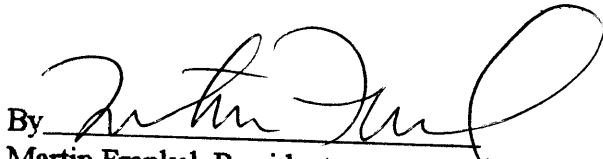
that if existing FCC out-of-band are met the digital signal will cause no impairment to the adjacent NTSC signals.

Respectfully submitted this 22 day of August, 1995.

Orion Broadcasting Systems

By 
Joseph Mignogna, Senior Engineer

Decathlon Communications, Inc.

By 
Martin Frankel, President

EQUIPMENT SETUP

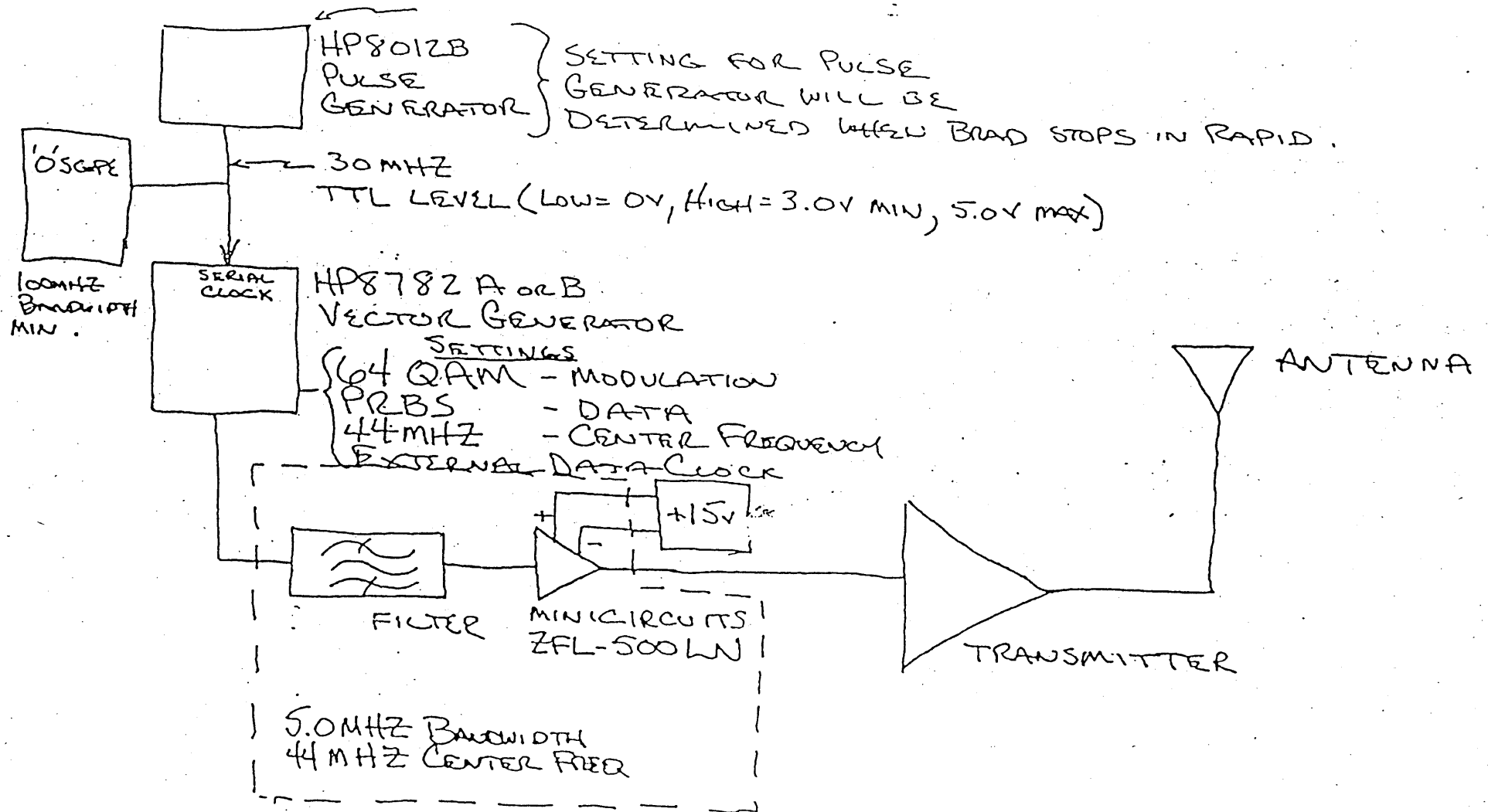


EXHIBIT B

EXHIBIT D

Test for Orion Vision
Wireless Cable - Atlantic City, New Jersey

Test Data

8-2-95

Location	ADJ Ch Pwr	Test Ch Pwr	ADJ Ch Pwr	Vector Generation dBM
Crossing Motor Lodge (10 miles)	N/C	70%	N/C	-8DBM
	N/C	100%	N/C	-7DBM
	N/C	120%	N/C	-6DBM
Top O' the Wave's (11 miles)	N/C	70%	N/C	-8DBM
	N/C	100%	N/C	-7DBM
	N/C	120%	N/C	-6DBM
Wesley Inn (12 miles)	N/C	70%	N/C	-8DBM
	N/C	100%	N/C	-7DBM
	N/C	130%	N/C	-6DBM
Hampton Inn (20 miles)	N/C	70%	N/C	-8DBM
	N/C	100%	N/C	-7DBM
	N/C	120%	N/C	-6DBM
Rudy's (20 miles)	N/C	70%	N/C	-8DBM
	N/C	100%	N/C	-7DBM
	N/C	120%	N/C	-6DBM
Office (Orion Vision) (15 miles)	N/C	70%	N/C	-8DBM
	N/C	95%	N/C	-7DBM
	N/C	120%	N/C	-6DBM
*Test Channel is CH#39 (Adjacent Channels are #38 & #40)				

P01

WESTCO COMM +--+ MARTY F

FAX 1111111111

RADIATED POWER ESTIMATE

EMCEE 20 WATT TRANSMITTERS

70% = 41.5 dBm
100% = 43.0 dBm
120% = 43.8 dBm

ANTENNA:

Andrew HMD-16VO GAIN = 14 dBi +14

460' Tower + 30' Tower Base To Connector

- 490' EW - 20 Wave Guide = -2.1 dB
.43 dB/100' at 2600 MHz

EMCEE COMBINER LOSS .7dB - .7 dB

RADIATED OUTPUT AT:
(Peak Power)

70% : $41.5 + 14 - 2.1 - .7 = 52.7$ dBm
100% : $43.0 + 14 - 2.1 - .7 = 54.2$ dBm
120% : $43.8 + 14 - 2.1 - .7 = 55.0$ dBm