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*ADMITTED IN PA ONLY
**OF COUNSEL

February 20, 1996

Mr. H. Franklin Wright
Experimental Licensing 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 seventh status report required pursuant to a condition placed on the above-referenced Experimental Station license.

This report provides results of testing to evaluate the effects that a foreign signal such as radar from a nearby airport would have on a digital signal, where the receive site was in close proximity to the airport.

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

Test location

Atlantic County, Corbin City N.J. in the service area of Orion Broadcasting.

Participants

Orion Broadcasting

Purpose of test

To evaluate the effects that a foreign signal such as radar from a near by airport would have on a digital signal if any at all, if the receive site was in close proximities of the Air Port. What type of filter would be most effective in eliminating the interference. How far away from the interference would the receive site have to be before there was no noticeable interfering signal.

Test Method
See Exhibit B

A 64 QAM digital signal was transmitted at 100% power from the head end of Orion Broadcasting using the equipment setup in Exhibit B. Adjacent analog channels were 38 and 40 with channel 39 transmitting a digital signal.

Receive test setup See Exhibit E

Test Results

The test results are as follows. The radar was noticeable in all the channels includeing channel 39. The test receive site antenna was a California Amplifier YAGI integrated antenna and downconverter LNBY I.F. 222 to 408 MHz 50 db gain. Using this setup in our survey van we picked a site close to Pomona Airport. Location was Mc Kee City on route 40 and 322. The interfering radar sweep was noticeable in all channels, Both analog and digital. Since there were no way to put any type of filter on the integrated YAGI we switched to a 24 screen and feed horn with separate down converter. The screen and feed horn was a lance Industries the downconverter is a California Amplifier with 32 db gain. With this setup there was still radar interferences in all channels. At this time we inserted a RF PASS BAND FILTER in line. The filter eliminated all radar interferences. The filter was inserter after the feed horn and before the Down Converter. This test was conducted 16 miles from the Transmitter site and 3 miles from the Airport. This test was also conducted in Brigantine 20 miles from the transmit site and 12 miles from the Airport. The third test site was Ocean City 9th and the Bay, 10 miles from the transmitter site and 13 miles from the bay.
In Ocean City there was no noticable interfering signal from Radar on any cahannel including the digital signal on channel 39.

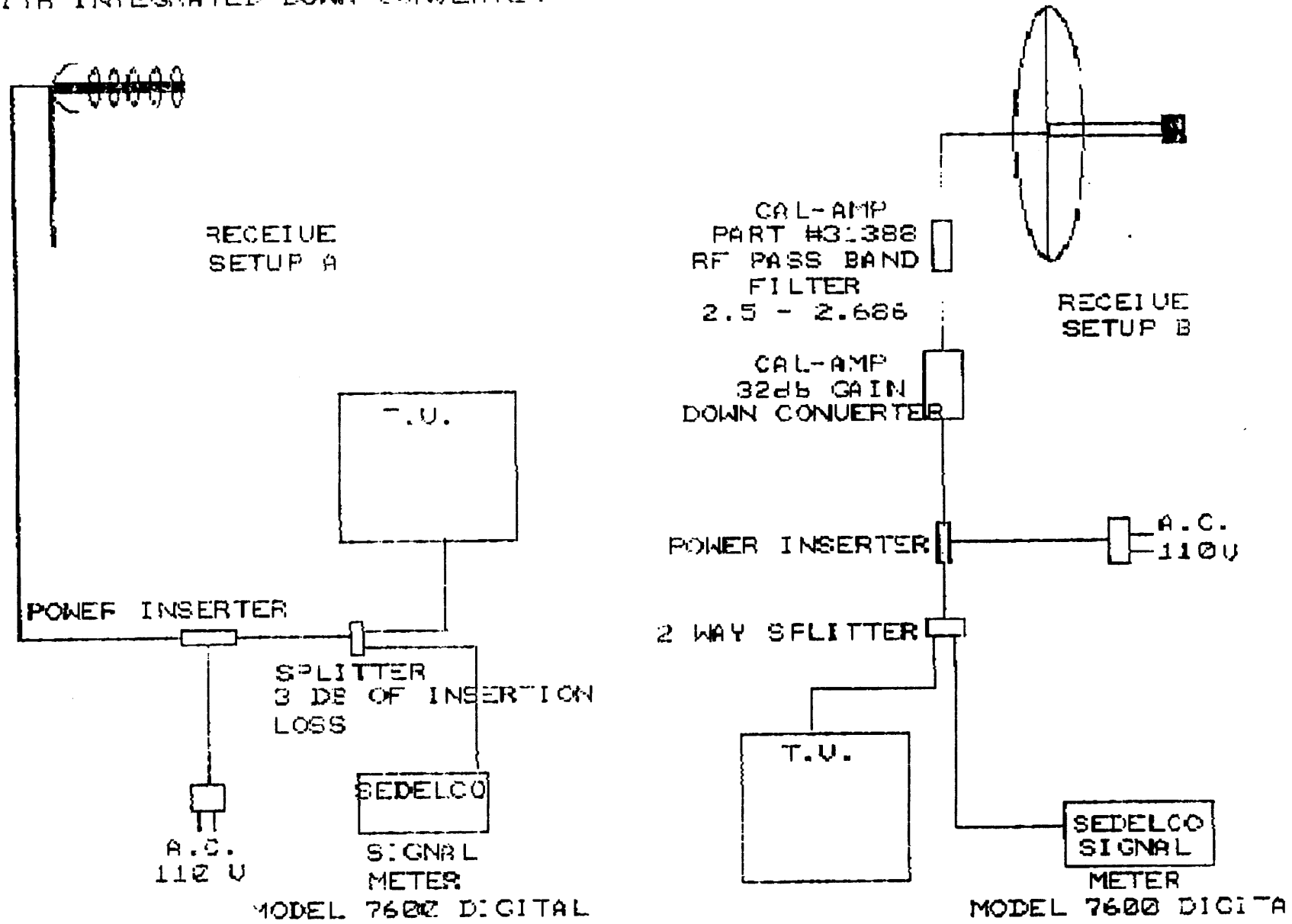
See exhibit D for test results

Conclusion

It seems that all the integrated type antennas incorporating antenna and downconverter including stand alone downconverters do not incorporate enough filtering in the input of their downconverter to filter our an interfering signal such as radar. It seems that these down converters are broad banded which makes them acceptable to interferences such as radar. This is proven by putting a pass band filter for 2.5-2.686 on the input of the downconverters that it eliminates the radar interferences on all the MMDS and ITFS channels both Analog and digital. Also the orientation of the receive antenna away from the interfering signal can attenuate the effects of the radar on the channels.

EXHIBIT E. TEST SETUP ORION BROADCASTING

CAL-AMP YAGGI ANTENNA
WITH INTEGRATED DOWN CONVERTER



Equipment Setup

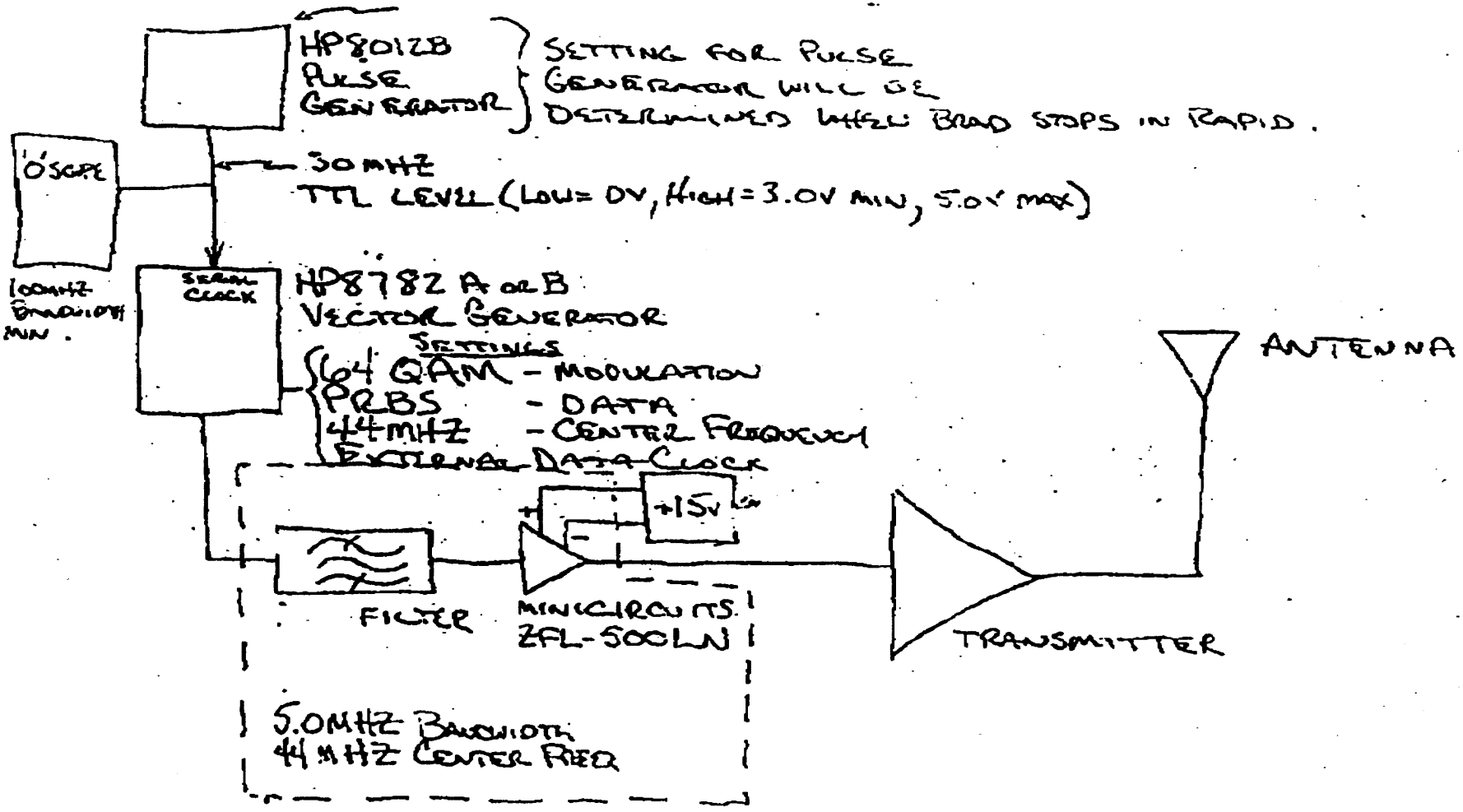


EXHIBIT B

ALL SIGNAL ARE IN dbmv McKee City 12 MILES NORTH OF THE TRANSMIT SITE
Route 40 and 322 4 MILES SOUTH WEST OF AIRPORT

MMDS & ITFS CHANNEL'S	YAGI SIGNAL	RADAR INTERFEARANCE	LANCE SCREEN WITH SEPARATE DOWNCONVERTER	INTERFEARANCE	with CAL-AMP PASS BAND FILTER INTERFEARANCE
24	9	YES	12	YES	NO
25	10	YES	15	YES	NO
26	9	YES	13	YES	NO
27	8	YES	12	YES	NO
28	8	YES	12	YES	NO
29	9	YES	12	YES	NO
30	10	YES	15	YES	NO
31	10	YES	15	YES	NO
32	10	YES	15	YES	NO
33	10	YES	15	YES	NO
34	10	YES	15	YES	NO
35	11	YES	13	YES	NO
36	10	YES	15	YES	NO
37	10	YES	15	YES	NO
38	8	YES	12	YES	NO
39	10	YES	15	YES	NO
40	9	YES	15	YES	NO
41	10	YES	15	YES	NO
42	9	YES	14	YES	NO
43	9	YES	14	YES	NO
44	10	YES	15	YES	NO
45	10	YES	15	YES	NO
46	9	YES	13	YES	NO
47	10	YES	15	YES	NO
48	10	YES	15	YES	NO
49	11	YES	16	YES	NO
50	10	YES	14	YES	NO
51	12	YES	16	YES	NO
52	10	YES	15	YES	NO
53	12	YES	16	YES	NO
54	14	YES	17	YES	NO

THE HIGHER CHANNELS HAD LESS RADAR INTERFEARANCE THAN THE LOWER CHANNELS
BUT THE INTERFEARANCE WAS STILL NOTICABLE

ONCE THE FILTER WAS INSERTED IN LINE THERE WAS NO NOTICABLE INTERFEARANC

ALL SIGNALS ARE IN dbuv Brigantine North End 20 MILES SOUTH EAST OF TRANSMIT SITE 12 MILES EAST OF AIRPORT

MMDS & ITFS CHANNEL'S	YAGI SIGNAL	RADAR INTERFEARANCE	LANCE SCREEN WITH SEPARATE DOWNCONVERTER	INTERFEARANCE	WITH CAL-AMP PASS BAND FILTER INTERFEARANCE
24	3	YES	5	YES	NO
25	5	YES	8	YES	NO
26	5	YES	6	YES	NO
27	4	YES	6	YES	NO
28	4	YES	6	YES	NO
29	4	YES	6	YES	NO
30	6	YES	8	YES	NO
31	6	YES	8	YES	NO
32	6	YES	8	YES	NO
33	6	YES	8	YES	NO
34	6	YES	8	YES	NO
35	6	YES	7	YES	NO
36	6	YES	9	YES	NO
37	6	YES	9	YES	NO
38	5	YES	8	YES	NO
39	6	YES	9	YES	NO
40	6	YES	8	YES	NO
41	5	YES	8	YES	NO
42	5	YES	7	YES	NO
43	5	YES	7	YES	NO
44	6	YES	8	YES	NO
45	4	YES	7	YES	NO
46	4	YES	7	YES	NO
47	4	YES	7	YES	NO
48	5	YES	7	YES	NO
49	6	YES	8	YES	NO
50	5	YES	7	YES	NO
51	5	YES	9	YES	NO
52	5	YES	8	YES	NO
53	6	YES	9	YES	NO
54	6	YES	10	YES	NO

NOTE ALL SIGNALS ARE dbmv Ocean City 10 Miles EAST OF TRANSMIT SITE
9 and Bay 13 MILES SOUTH EAST OF ARRAY

MMDS & ITFS CHANNEL'S	YAGI SIGNAL	RADAR INTERFEARANCE	LANCE SCREEN WITH SEPARATE DOWNCONVERTER INTERFEARANCE	CAL-AMP PASS BAND FILTER INTERFEARANCE
24	15	NO		
25	16	NO		
26	16	NO		
27	14	NO		
28	14	NO		
29	14	NO		
30	16	NO		
31	15	NO		
32	15	NO		
33	15	NO		
34	17	NO		
35	17	NO		
36	17	NO		
37	17	NO		
38	15	NO		
39	15	NO		
40	15	NO		
41	15	NO		
42	15	NO		
43	15	NO		
44	16	NO		
45	14	NO		
46	14	NO		
47	14	NO		
48	15	NO		
49	17	NO		
50	16	NO		
51	16	NO		
52	16	NO		
53	15	NO		
54	15	NO		

THERE WAS NO NEED TO USE ADDITIONAL FILTERS
THERE WAS NO INTERFEARANCE FROM RADAR IN THIS AREA