



# Multicomm Sciences Int'l, Inc

Wireless Engineering Services

FCC - Satellite - Microwave - Lightguide  
Frequency Coordination - Path Surveys  
Radiation Hazard Testing - CAD & Route Mapping

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## FREQUENCY COORDINATION REPORT

### 4 AND 6 GHZ TRANSMIT-RECEIVE EARTH STATION

FOX NEWS NETWORK LLC

SECAUCUS, NJ

FEBRUARY 11, 2005

1. **CONCLUSIONS**

An Interference Study considering all existing, proposed and prior coordinated microwave facilities within the coordination contours of the proposed Earth Station demonstrates that this site will operate satisfactorily with the Microwave Environment as defined on the frequency coordination data sheet.

2. **SUMMARY OF RESULTS**

All of the potential great circle interference cases at 6 GHz were found to be acceptable on the basis that harmful interference will not likely result from the proposed operation, considering the criteria, the potential interference receive levels, and the total propagation losses.

There were no reported cases of rain scatter beam intersections.

3. **SUPPLEMENTAL SHOWING**

The Satellite Earth station proposed in this Application was coordinated by Multicomm Sciences International, Inc., Frequency Coordinators Group, using computer techniques and in accordance with Parts 25 of the FCC Rules and Regulations.

4. **FREQUENCY COORDINATION DATA**

Frequency Coordination Data which is attached, contains the following:

Technical Characteristics of Proposed Earth Station

Horizon Antenna Gain Plot

Discrimination Angle Plot

Local Horizon Plot

Satellite Elevation Plot

4 and 6 GHz Coordination Contour

4 and 6 GHz Rain Scatter

5. **FREQUENCY COORDINATION STATEMENT (FCC PART 101)**

Holders of licenses, permittees, prior filed applicants or planners of 6 GHz transmitting stations were notified on January 11, 2005 of the proposed Earth Station technical details in accordance with Section 25.203 (c-2) of the FCC Rules and Regulations. Satisfactory coordination was achieved on the basis that harmful interference would not occur, or that sufficient terrestrial blocking exists.

AT&T  
New Cingular Wireless Services  
Cellco Partnership-Newark  
Intermedia Services, LLC  
MCI Worldcom Network Services  
New York SMSA LP  
Suffolk County Police Dept  
AT&T Wireless Services of FL,-East of Mississippi  
Vanguard Cellular Pennsylvania LP  
CBS Broadcasting  
National Grid USA Service Co  
PSEG Services Corp  
Cellco Partnership – Newark-Dallas Route  
American Cellular Corporation  
Cellco Partnership – CT, W-MA  
Cellco Partnership – Phil Tri State Rgn  
Cellco Partnership – W-NY  
Cellco Partnership – PA Region  
Lenfest MNC  
Corban Networks  
Direct Broadcast Services  
Exelon Generation LLC  
Cingular Pennsylvania LLC  
Binghamton Celltelco  
Northeast Pennsylvania SMSA LP  
Orange Poughkeepsie SMSA LP  
Penn Service Microwave  
Global Crossing North America  
Southwestern Bell Mobile Systems LLC  
Delmarva Power & Light

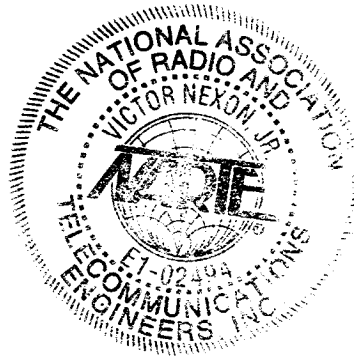
PECO Energy  
Atlantic City Electric

6. **Certification of Person Responsible for Preparing Frequency Coordination Information Submitted in this Application**

I hereby certify that I am the technically qualified person responsible for preparation of the frequency coordination information contained in this application; that I am familiar with Parts 101 and 25 of the Commission's Rules; that I have either prepared or reviewed the frequency coordination information submitted in this application; and, that it is complete and accurate to the best of my knowledge.



Victor Nexon, Jr  
President  
Multicomm Sciences International, Inc.  
February 11, 2005



SATELLITE EARTH STATION  
FREQUENCY COORDINATION DATA  
1/11/05

COMPANY NAME:	FOX NEWS NETWORK LLC	
EARTH STATION LOCATION:	SECAUCUS, NJ	
LATITUDE (DMS):	40 47 42.8 NAD 83	
LONGITUDE (DMS):	74 4 10.2 "	
SITE GROUND ELEVATION (FT. AMSL):	3.0	
ANTENNA CENTER LINE ( FT)	55.0	
ANTENNA TYPE:	VERTEX	
	4.8 KPC	
ANTENNA DIAMETER (METERS):	4.8	
4 GHZ ANTENNA GAIN (DBI):	44.0	
15 DB HALF BEAMWIDTH (DEG):	1.17	
6 GHZ ANTENNA GAIN (DBI):	48.1	
15 DB HALF BEAMWIDTH (DEG):	.70	
OPERATING MODE:	T/R	
RECEIVE BAND (MHZ):	3700 - 4200	
TRANSMIT BAND (MHZ):	5925 - 6425	
EMISSION DESIGNATOR	36MOF3F 36MOG7W	
MODULATION:	ANALOG	DIGITAL
MAX. AVAILABLE RF POWER (DBW/4KHZ):	- .5	-14.0
(DBW):	26.5	25.5
MAX. EIRP (DBW/4KHZ):	47.6	34.1
(DBW):	74.6	73.6
MAX. PERMISSIBLE INTERFERENCE POWER		
4 GHZ 20% (DBW)	-140.0	
4 GHZ 0.0100% (DBW)	-130.0	
6 GHZ 20% (DBW/4KHZ)	-154.0	
6 GHZ 0.0025% (DBW/4KHZ)	-131.0	
SATELLITE ARC (MIN/MAX)	40/143 DEG	
AZIMUTH	134.0/255.9 DEG	
ELEVATION	31.4/ 7.2 DEG	
RADIO CLIMATE	A	
RAIN ZONE	2	
MAXIMUM GREAT CIRCLE COORDINATION DISTANCE (KM)		
4 GHZ	280.5	
6 GHZ	225.7	
PRECIPITATION SCATTER CONTOUR RADIUS (KM)		
4 GHZ	185.8	
6 GHZ	195.1	
MULTICOMM SCIENCES INTERNATIONAL, INC.		
Denville, NJ 07834 (973)-627-7400		

40 47 42.8  
74 4 10.2

AZ DEG	DISC DEG	HOR DEGREES	ANG	4GHZ HOR GAIN	6GHZ HOR GAIN	4GHZ COORD KM	6GHZ COORD KM	RAIN 4 SCAT KM	RAIN 6 SCAT KM
5.	109.	.0		-12.0	-14.0	126.3	101.7	185.8	195.1
10.	114.	.0		-12.0	-14.0	124.7	100.3	185.8	195.1
15.	114.	.0		-12.0	-14.0	124.5	100.2	185.8	195.1
20.	110.	.0		-12.0	-14.0	125.9	101.3	185.8	195.1
25.	106.	.0		-12.0	-14.0	127.3	102.4	185.8	195.1
30.	102.	.0		-12.0	-14.0	128.8	103.7	185.8	195.1
35.	98.	.0		-12.0	-14.0	130.4	105.0	185.8	195.1
40.	93.	.0		-12.0	-14.0	132.2	106.4	185.8	195.1
45.	89.	.0		-12.0	-14.0	134.0	107.8	185.8	195.1
50.	85.	.0		-12.0	-14.0	135.9	109.4	185.8	195.1
55.	81.	.0		-12.0	-14.0	138.0	111.1	185.8	195.1
60.	76.	.0		-12.0	-14.0	140.2	112.8	185.8	195.1
65.	72.	.0		-12.0	-14.0	142.6	114.7	185.8	195.1
70.	68.	.0		-12.0	-14.0	145.1	116.8	185.8	195.1
75.	64.	.0		-12.0	-14.0	147.8	118.9	185.8	195.1
80.	60.	.0		-12.0	-14.0	150.6	121.2	185.8	195.1
85.	56.	.0		-12.0	-14.0	153.7	123.7	185.8	195.1
90.	52.	.0		-12.0	-14.0	156.9	126.3	185.8	195.1
95.	48.	.0		-12.0	-14.0	160.3	129.0	185.8	195.1
100.	45.	.0		-9.3	-9.3	163.9	131.9	185.8	195.1
105.	42.	.0		-8.5	-8.5	167.5	134.8	185.8	195.1
110.	39.	.0		-7.7	-7.7	171.2	137.7	185.8	195.1
115.	36.	.0		-7.0	-7.0	174.6	140.5	185.8	195.1
120.	34.	.0		-6.3	-6.3	177.7	143.0	185.8	195.1
125.	33.	.0		-5.8	-5.8	180.2	145.0	185.8	195.1
130.	32.	.0		-5.5	-5.5	181.7	146.2	185.8	195.1
135.	31.	.0		-5.4	-5.4	182.0	146.5	185.8	195.1
140.	32.	.0		-5.6	-5.6	181.2	145.8	185.8	195.1
145.	33.	.0		-6.0	-6.0	179.3	144.3	185.8	195.1
150.	35.	.0		-6.6	-6.6	176.6	142.1	185.8	195.1
155.	37.	.0		-7.2	-7.2	173.4	139.5	185.8	195.1
160.	39.	.0		-7.8	-7.8	170.8	137.4	185.8	195.1
165.	41.	.0		-8.2	-8.2	168.8	135.8	185.8	195.1
170.	42.	.0		-8.5	-8.5	167.3	134.7	185.8	195.1
175.	43.	.0		-8.7	-8.7	166.5	134.0	185.8	195.1
180.	43.	.0		-8.8	-8.8	166.2	133.8	185.8	195.1
185.	43.	.0		-8.7	-8.7	166.5	134.0	185.8	195.1
190.	42.	.0		-8.5	-8.5	167.3	134.7	185.8	195.1
195.	41.	.0		-8.2	-8.2	168.8	135.8	185.8	195.1
200.	39.	.0		-7.8	-7.8	170.8	137.4	185.8	195.1
205.	37.	.0		-7.2	-7.2	173.4	139.5	185.8	195.1

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## SECAUCUS, NJ

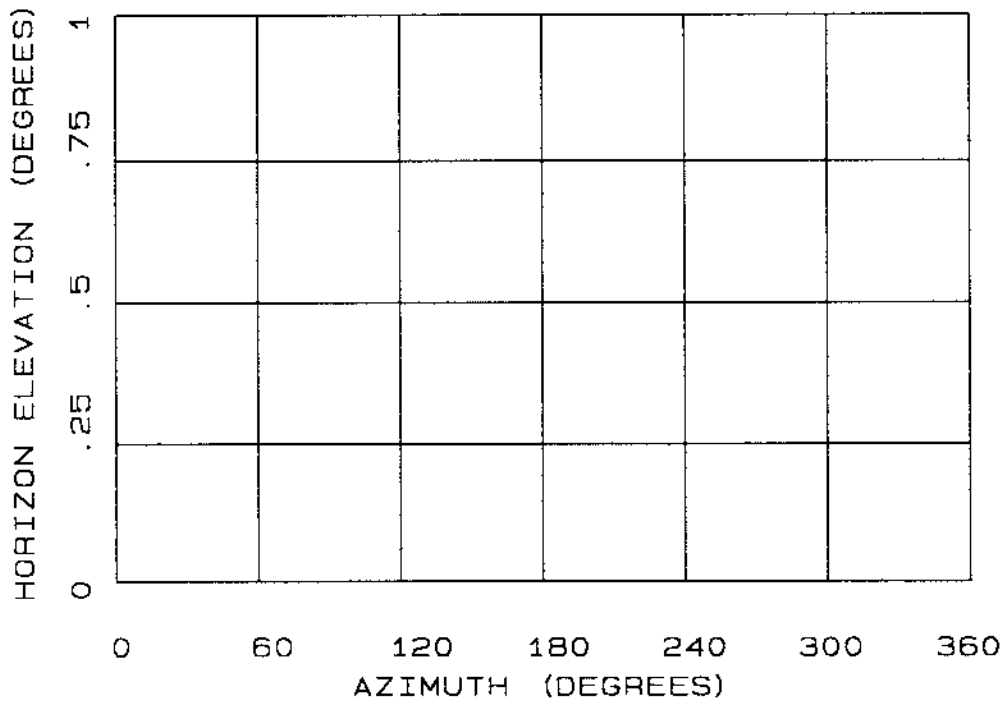
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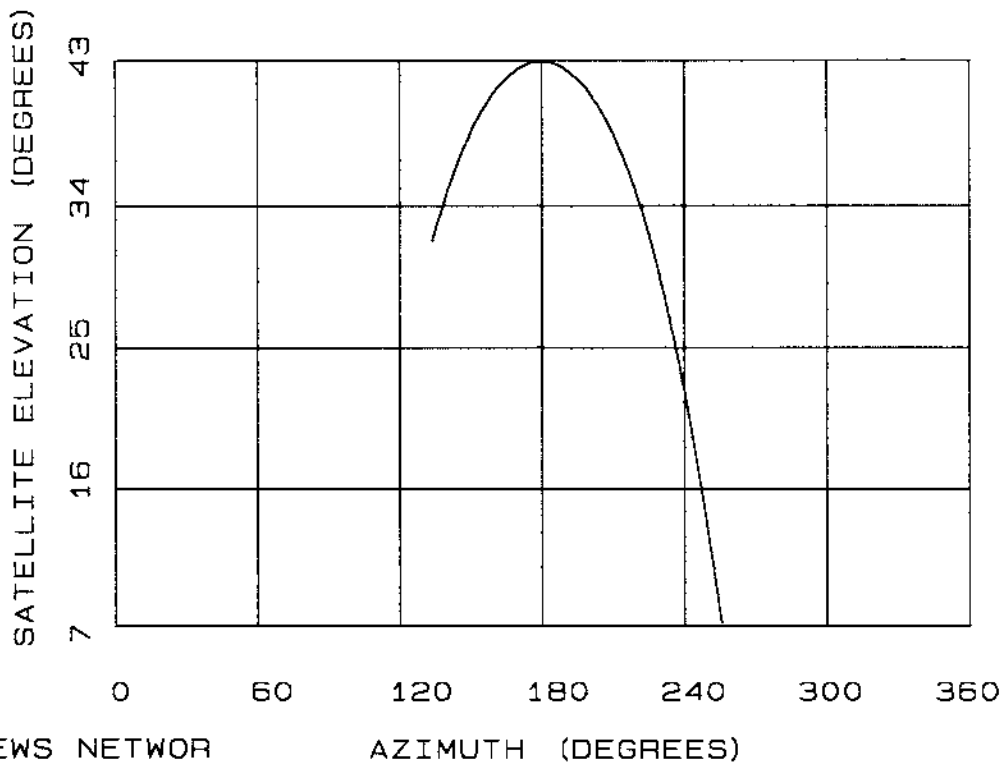
AZ DEG	DISC DEG	HOR DEGREES	ANG	4GHZ HOR GAIN	6GHZ HOR GAIN	4GHZ COORD KM	6GHZ COORD KM	RAIN 4 SCAT KM	RAIN 6 SCAT KM
210.	35.	.0		-6.5	-6.5	176.7	142.2	185.8	195.1
215.	32.	.0		-5.7	-5.7	180.8	145.5	185.8	195.1
220.	29.	.0		-4.7	-4.7	185.8	149.5	185.8	195.1
225.	26.	.0		-3.5	-3.5	191.8	154.4	185.8	195.1
230.	23.	.0		-2.1	-2.1	199.3	160.4	185.8	195.1
235.	20.	.0		-.4	-.4	208.6	167.9	185.8	195.1
240.	16.	.0		1.7	1.7	220.7	177.6	185.8	195.1
245.	13.	.0		4.3	4.3	237.1	190.8	185.8	195.1
250.	9.	.0		7.8	7.8	260.8	209.9	185.8	195.1
255.	7.	.0		10.5	10.5	280.5	225.7	185.8	195.1
260.	8.	.0		9.1	9.1	269.6	217.0	185.8	195.1
265.	12.	.0		5.4	5.4	244.1	196.5	185.8	195.1
270.	16.	.0		2.0	2.0	222.8	179.3	185.8	195.1
275.	20.	.0		-.7	-.7	206.8	166.4	185.8	195.1
280.	25.	.0		-3.0	-3.0	194.5	156.5	185.8	195.1
285.	30.	.0		-4.9	-4.9	184.7	148.7	185.8	195.1
290.	35.	.0		-6.5	-6.5	176.7	142.2	185.8	195.1
295.	40.	.0		-8.0	-8.0	170.0	136.8	185.8	195.1
300.	45.	.0		-9.2	-9.2	164.3	132.2	185.8	195.1
305.	50.	.0		-12.0	-14.0	159.3	128.2	185.8	195.1
310.	54.	.0		-12.0	-14.0	154.9	124.7	185.8	195.1
315.	59.	.0		-12.0	-14.0	151.0	121.5	185.8	195.1
320.	64.	.0		-12.0	-14.0	147.5	118.7	185.8	195.1
325.	69.	.0		-12.0	-14.0	144.3	116.1	185.8	195.1
330.	74.	.0		-12.0	-14.0	141.4	113.8	185.8	195.1
335.	79.	.0		-12.0	-14.0	138.7	111.6	185.8	195.1
340.	84.	.0		-12.0	-14.0	136.3	109.7	185.8	195.1
345.	89.	.0		-12.0	-14.0	134.0	107.8	185.8	195.1
350.	94.	.0		-12.0	-14.0	131.9	106.1	185.8	195.1
355.	99.	.0		-12.0	-14.0	129.9	104.5	185.8	195.1
360.	104.	.0		-12.0	-14.0	128.1	103.1	185.8	195.1

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### LOCAL HORIZON PLOT



### SATELLITE ELEVATION PLOT

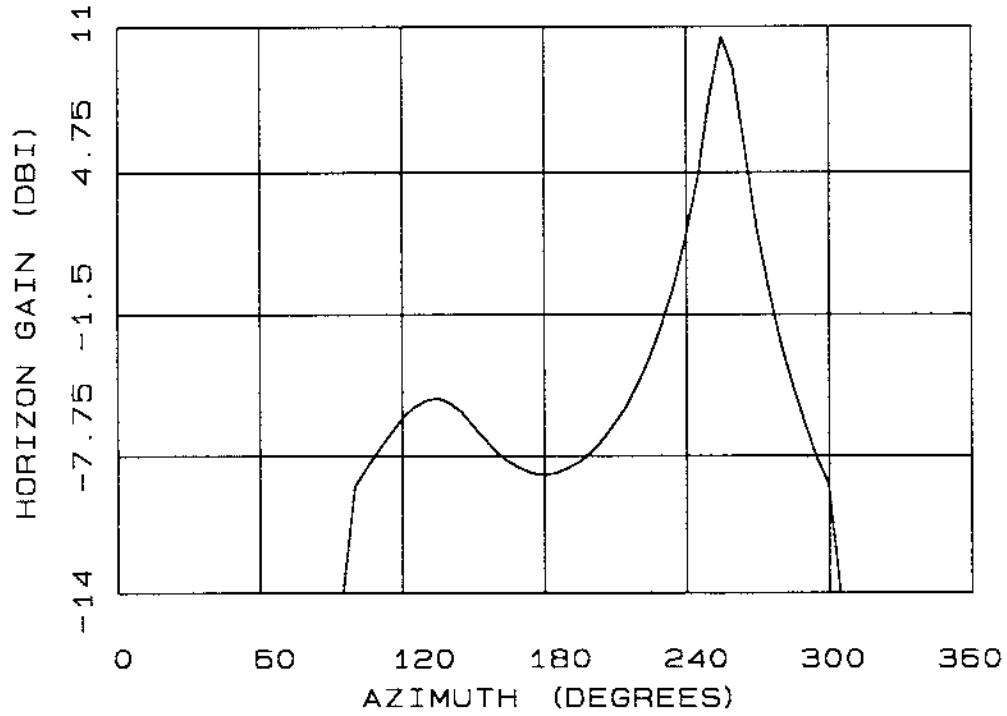


FOX NEWS NETWORK  
SECAUCUS, NJ  
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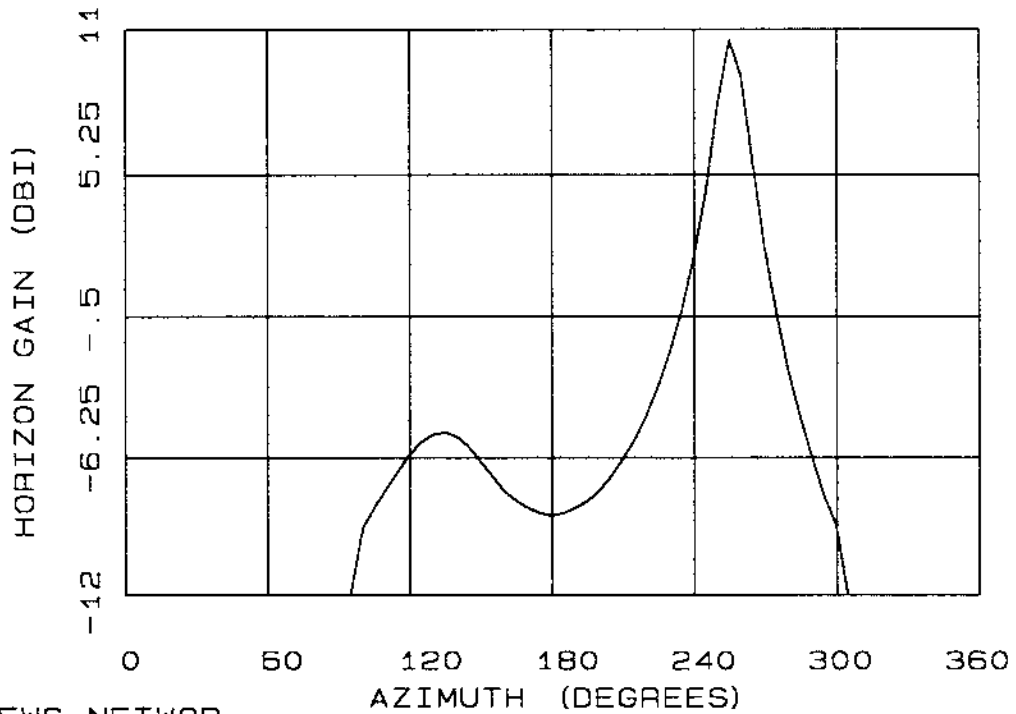
MSI



HORIZON ANTENNA GAIN PLOT 6 GHZ

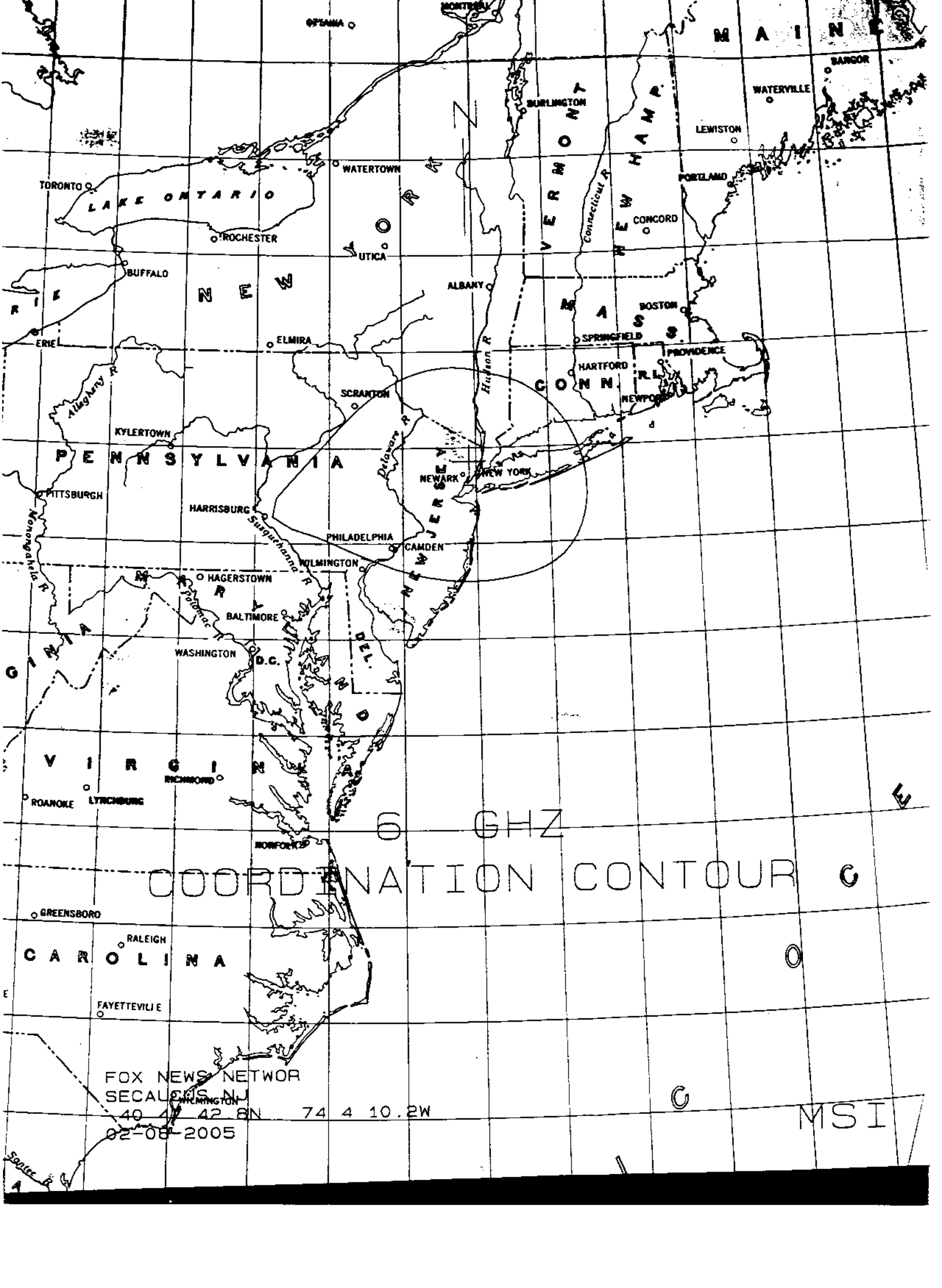


HORIZON ANTENNA PLOT 4 GHZ



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SECAUCUS, NJ  
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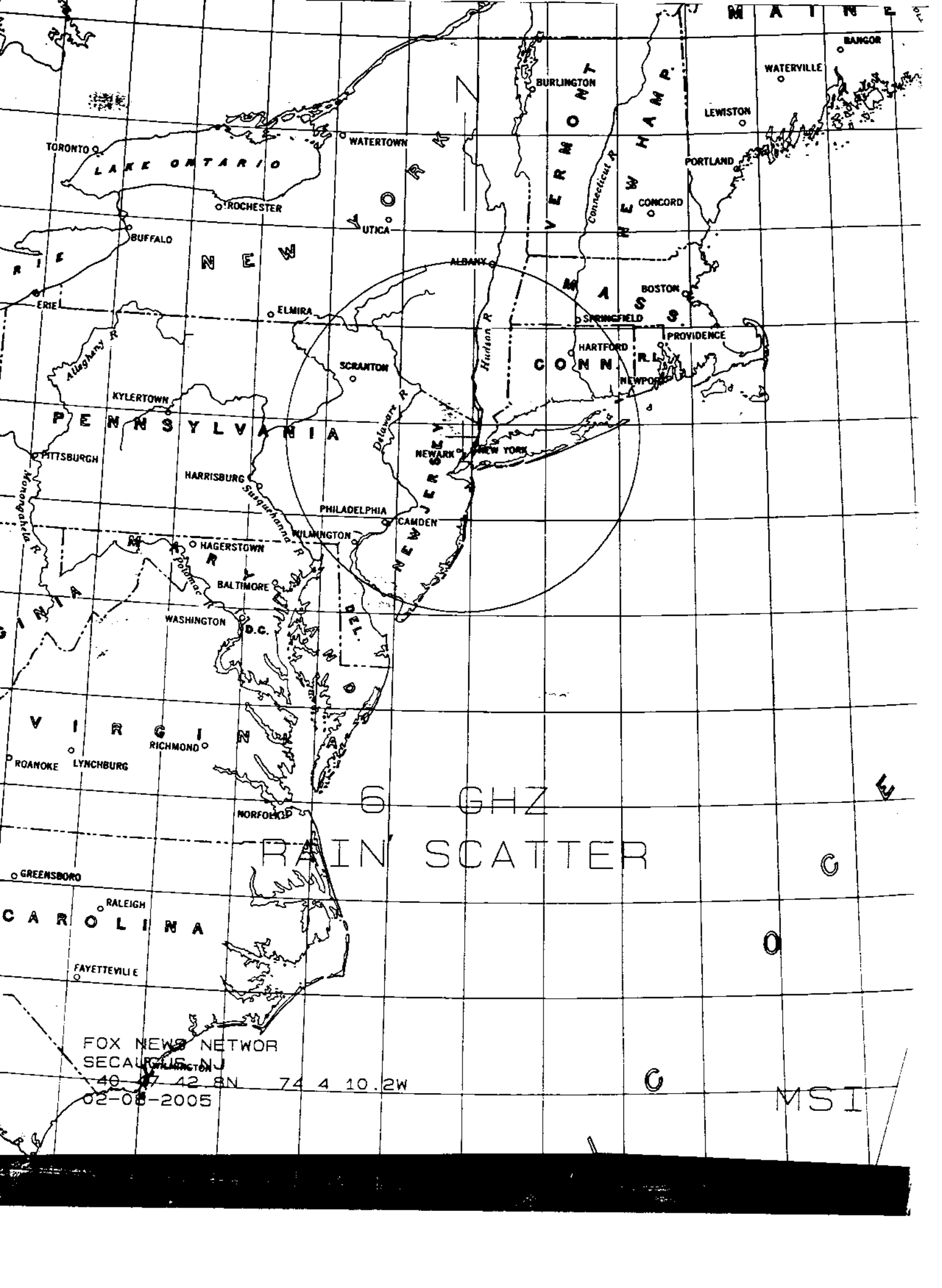
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60 GHz  
COORDINATION CONTOUR

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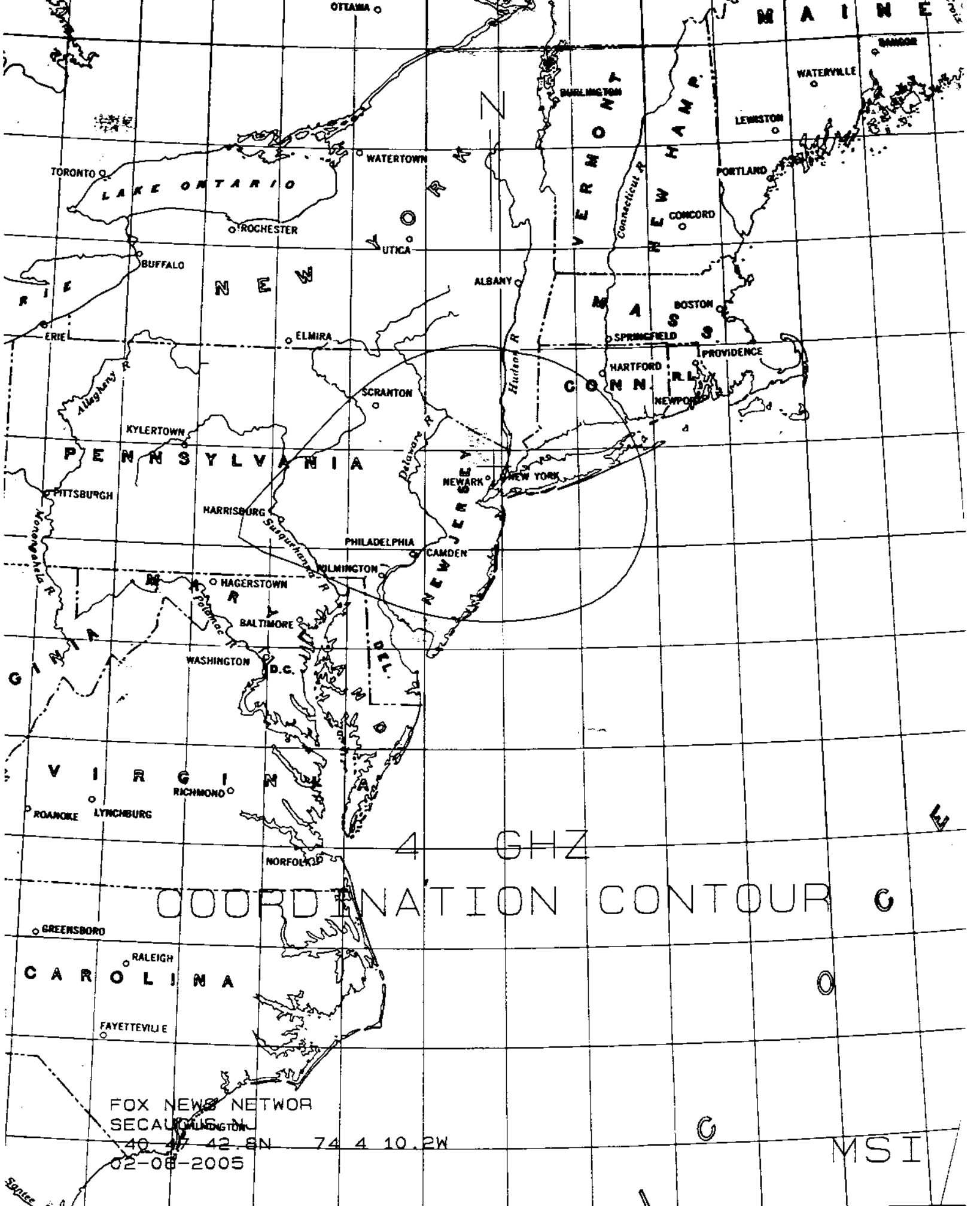
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RAIN SCATTER

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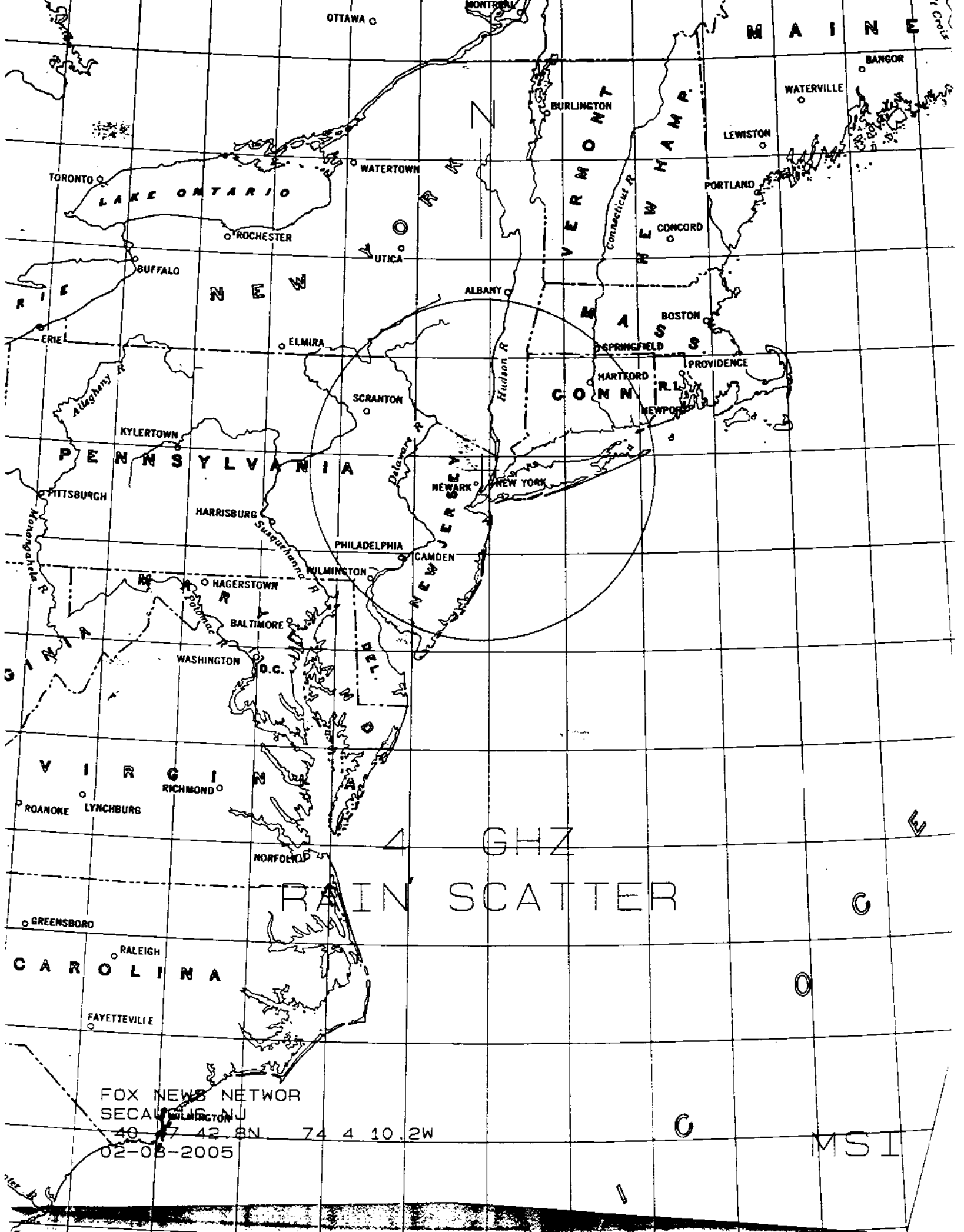


4 GHz  
COORDINATION CONTOUR

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02-08-2005

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January 11, 2005

TO: All Coordinators

RE: Fox News Network  
T/R Earth Station  
Secaucus, NJ

Dear Sir or Madam:

On behalf of our client, Fox News Network, we are forwarding the attached coordination data for a transmit-receive earth station in Secaucus, NJ.

Pursuant to Part 25.203 © of the FCC Rules and Regulations, a frequency coordination study of the facilities covered by this coordination was conducted by MSI. The results of the study indicate that no unacceptable interference will result.

We request that you examine the enclosed data for potential interference. **We would appreciate a response by January 21, 2005. If we do not receive a response by that date, we shall assume you have no objections.**

If you should have any questions, please do not hesitate to contact MSI.

Sincerely,

Andrea Palsulich, Manager  
Data Processing Dept  
Enc.