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ENGINEERING REPORT

Toms River, NJ, Channel 283D FM Translator Application

EXHIBIT 1: LPFM PRECLUSION STUDY

Priority Radio, Inc. ("Applicant") submits this LPFM Preclusion Study for a new FM translator station at Toms River, NJ. The pending Tech Box file number is BNPFT-20030312AFP. The corresponding technical amendment includes a channel displacement from 281 to 283 (and a minor correction to the specified coordinates). This Exhibit 1 addresses only the LPFM Preclusion Study requirements of the technical amendment. (The other technical requirements of this amendment are address in a separate document of this on-line filing.)

LPFM PRECLUSION STUDY RESULTS

This Engineering Report demonstrates that this application meet the FCC's requirements for this Auction 83 FM translator pursuant to *Creation of a Low Power FM Service, Amendment of Service Rules and Eligibility Rules for FM Broadcast Translator Stations*, Fifth Order on Reconsideration and Sixth Report and Order, FCC 12-144 (re;. December 4, 2012) ("Fifth Order on Reconsideration"). Additionally, the FCC's LPFM spectrum availability program, http://www.fcc.gov/Bureaus/MB/Databases/source_code/lpfm6.20121206.zip ("LPFM6"), is used as support for this Engineering Report.

An LPFM Preclusion Study is required by this application (based on the location of the herein proposed transmitter site) to the following *Spectrum Limited* Arbitron Metro Market:

Monmouth-Ocean (aka Lakewood, NJ for LPFM6 Program) –
Mrkt # 53; 30 min. grid centered at N 40-05-52 W 74-13-05 (d,m,s; NAD 27).

Because a technical amendment is included with this tech box filing, an LPFM Preclusion Study is required by this application (based on the location of the herein proposed transmitter site) to the following *Spectrum Available* Arbitron Metro Market:

Atlantic City-Cape May, NJ –
Mrkt # 145; 30 min. grid centered at N 39-21-51 W 74-25-24 (d,m,s; NAD 27).

Note that for the *Spectrum Available* Grid Studies, the LPFM6 study includes second adjacent and pending 1983 FM translator applications (inclusions that are not necessary for Spectrum Limited Grid Studies).

Metro Area Preclusion Study Results

Monmouth-Ocean Metro Market

Figure 1, attached, is the complete LPFM6 output file for the Monmouth-Ocean Metro Market with the study centered at the grid center.

From Figure 1 it is shown that zero channels are available within the 30-minute Grid for future LPFM on the same channel (283) or first adjacent channel below (282) of the herein proposed FM translator.

From Figure 1 it is also shown that zero channels are available within 15 kilometers of the proposed transmitter site (when rounded to the nearest kilometer) for future LPFM on the first-adjacent channel (284). (Pursuant to Section 73.807c, since the proposed 60 dBu F50,50 service contour extends only 7.1 kilometers at its greatest distance, the spacing requirement from a future first-adjacent channel LPFM must be separated by 15 km.) The nearest available LPFM channel/point for channel 284 is at N 40-02-52 W 74-05-05 and is located 15.7 km from the proposed transmitter site.

Therefore, as required by the Fifth Order on Reconsideration, this FM translator will not preclude the future use of a LPFM application from a potential LPFM channel/point located within the 30-minute Monmouth-Ocean Grid.

Atlantic City-Cape May Metro Market

Figure 2, attached, is the complete LPFM6 output file for the Atlantic City-Cape May Metro Market with the study centered at the grid center.

From Figure 2 it is shown that zero channels are available within the 30-minute Grid for future LPFM on the same channel (283) or first adjacent channel above (284) of the herein proposed FM translator.

Although Figure 2 identifies adjacent channel 282 as having available LPFM

points in the Metro Market, the nearest grid point of the Atlantic City-Cape May Metro Market is located 37.5 kilometers from the proposed FM translator site and, therefore, all available LPFM points on channel 282 are unaffected by this proposal.

Therefore, as required by the Fifth Order on Reconsideration, this FM translator will not preclude the future use of a LPFM application from a potential LPFM channel/point located within the 30-minute Atlantic City-Cap May Grid.

Transmitter Site Test Study Results

This study proposes a site that is located within a Spectrum Limited Market's Study Grid and is generally not required. A *Transmitter Site Test* was made out of an abundance of caution and is submitted below showing that the study passes the test.

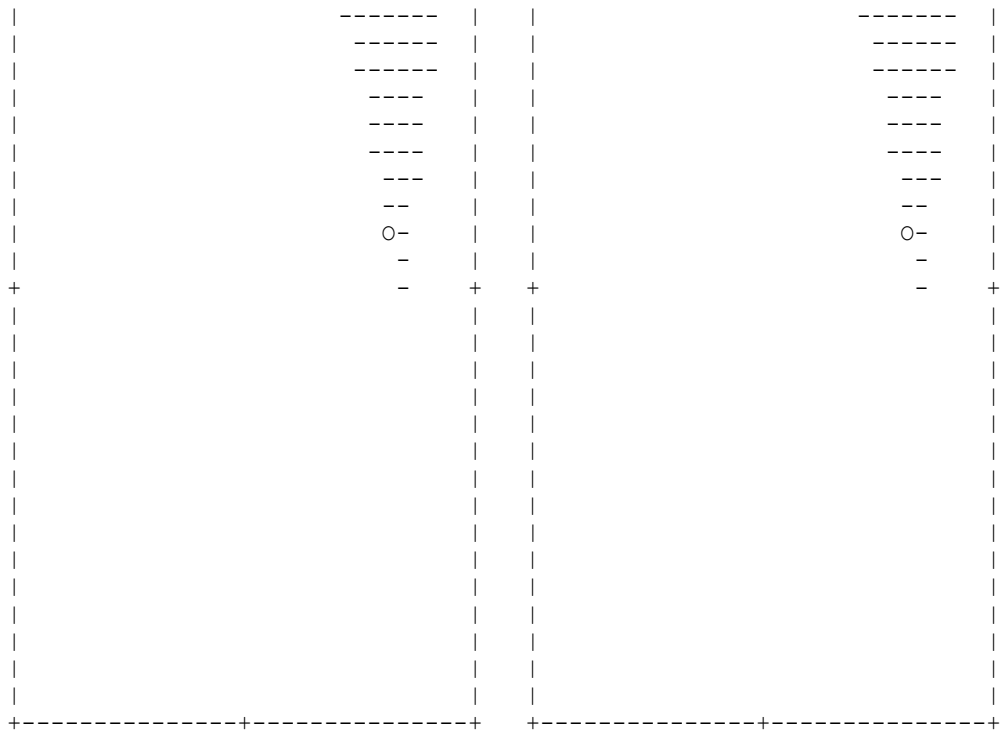
Figure 3, attached, is the complete LPFM6 output file for a study centered at the herein proposed translator site. From this site, the center location is shown to NOT be available on any channel for future LPFM. Therefore, since at no channel exists for a future LPFM at the proposed transmitter site, the transmitter site test for this application is successfully passed.

Lakewood, NJ
Latitude 40-05-52
Longitude 074-13-05
Grid Size 31 x 31
Micro FM 100 Watts at 30m HAAT
Co-Channel and 1st Adjacent Protected
2nd Adjacent Channel Not Protected
3rd Adjacent Channel Not Protected
I.F. Not Protected
TV Channel 6 Protected
CP Records Protected
APP Records Protected
FM Translators Protected
TV Channel 6 Translators/LP Protected
Auc83 FX App Records Not Protected

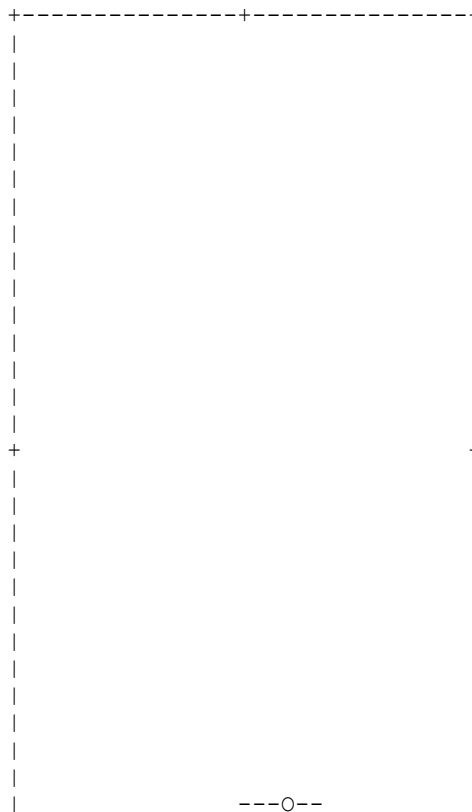
Total	465
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Availability of Channel 228 (X)

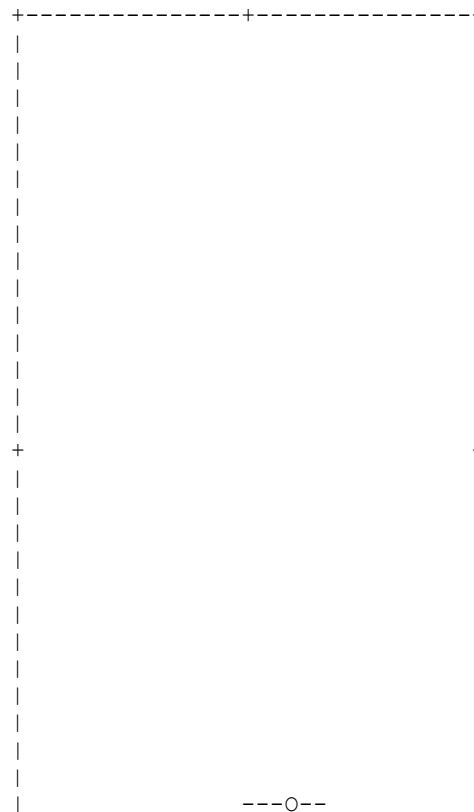
Two empty dashed boxes, each measuring 10 cm by 10 cm, provided for drawing.



Point #173 at 40-07-52 074-03-05
 Lakewood, NJ
 Latitude 40-05-52
 Longitude 074-13-05
 Least preclusive siting
 Availability of Channel 229 (X)



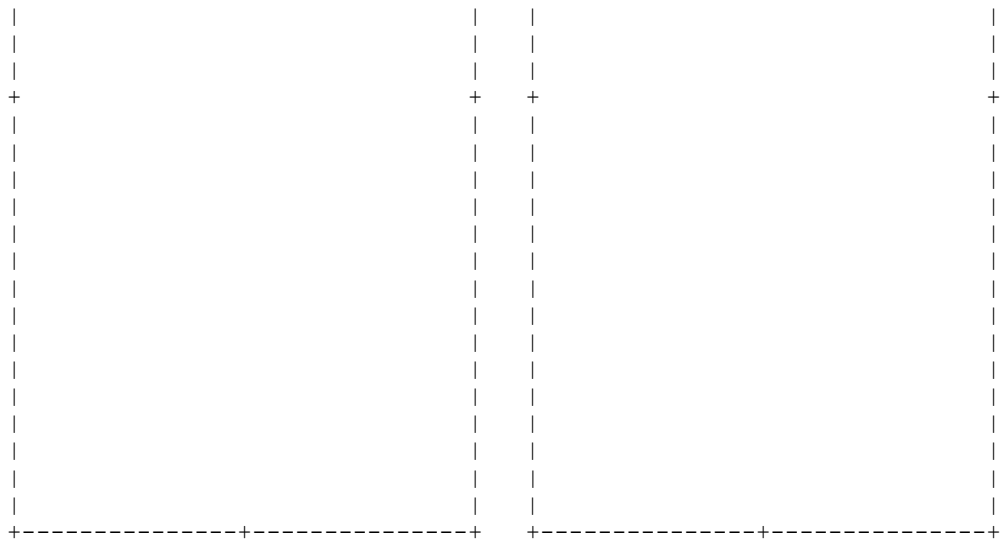
Point #173 at 40-07-52 074-03-05
 Lakewood, NJ
 Latitude 40-05-52
 Longitude 074-13-05
 Most preclusive siting
 Availability of Channel 229 (X)



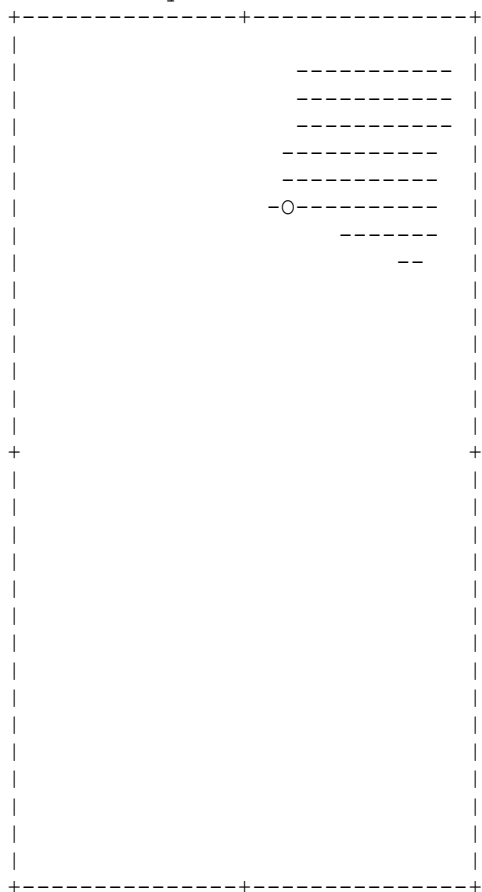
Point #375 at 39-52-52 074-10-05
Lakewood, NJ
Latitude 40-05-52
Longitude 074-13-05
Most preclusive siting
Availability of Channel 236 (X)

Point #092 at 40-19-52 074-00-05
Lakewood, NJ
Latitude 40-05-52
Longitude 074-13-05
Most preclusive siting
Availability of Channel 260 (X)

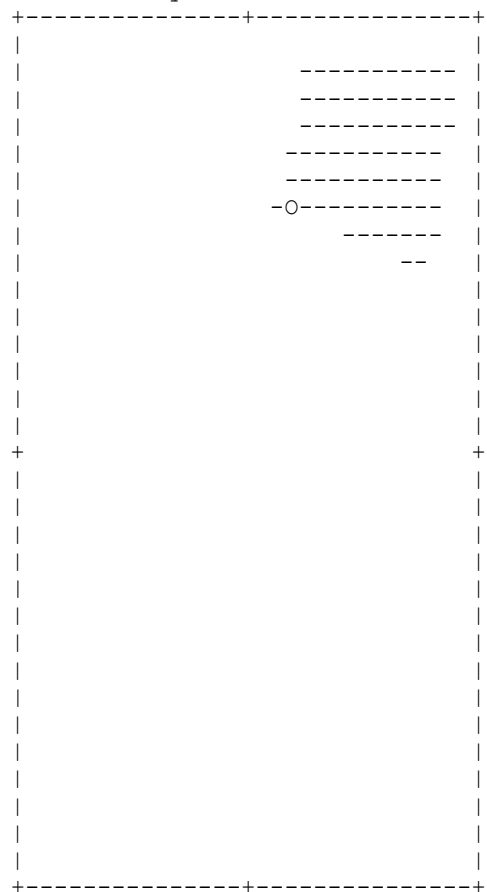
A large rectangular box with dashed lines. At the bottom right corner, there is a small circle.



Point #089 at 40-16-52 074-00-05
 Lakewood, NJ
 Latitude 40-05-52
 Longitude 074-13-05
 Least preclusive siting
 Availability of Channel 264 (X)



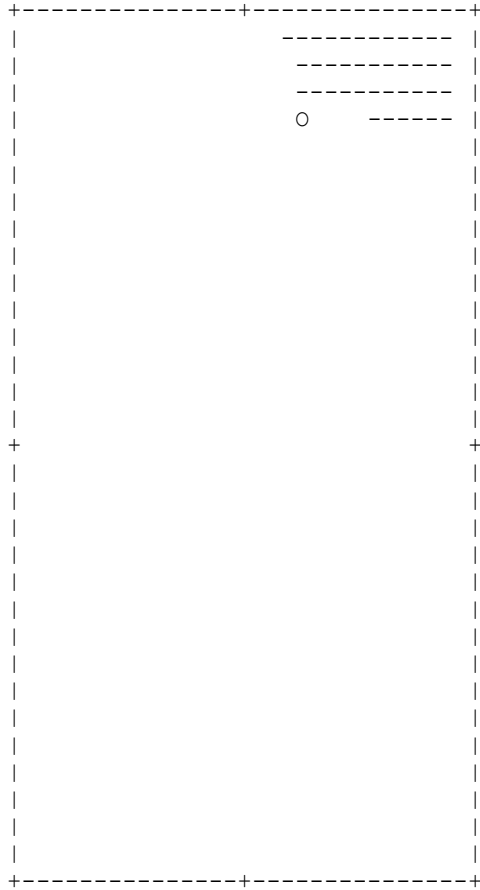
Point #089 at 40-16-52 074-00-05
 Lakewood, NJ
 Latitude 40-05-52
 Longitude 074-13-05
 Most preclusive siting
 Availability of Channel 264 (X)



Point #397 at 40-14-52 074-10-05
 Lakewood, NJ

Point #397 at 40-14-52 074-10-05
 Lakewood, NJ

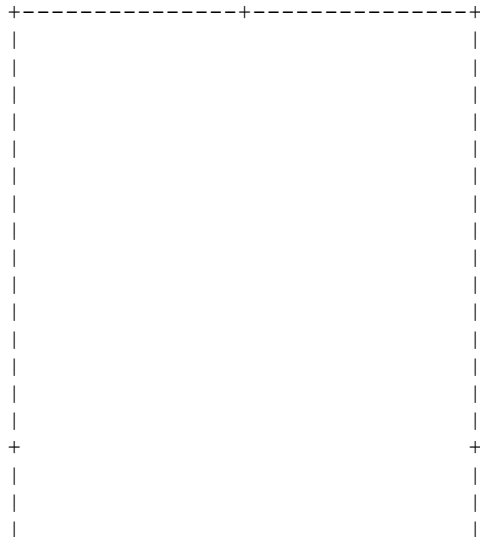
Latitude 40-05-52
 Longitude 074-13-05
 Least preclusive siting
 Availability of Channel 272 (X)



Latitude 40-05-52
 Longitude 074-13-05
 Most preclusive siting
 Availability of Channel 272 (X)

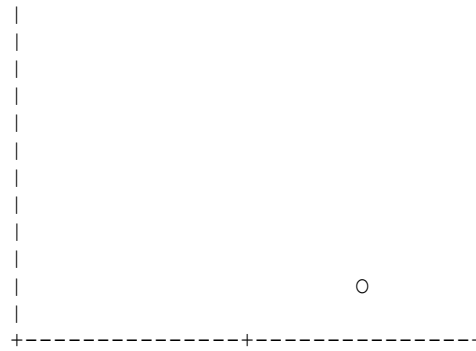
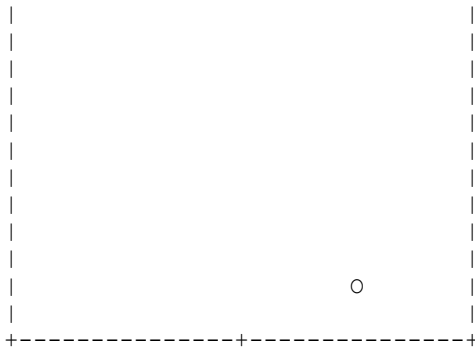


Point #369 at 40-17-52 074-09-05
 Lakewood, NJ
 Latitude 40-05-52
 Longitude 074-13-05
 Least preclusive siting
 Availability of Channel 273 (X)

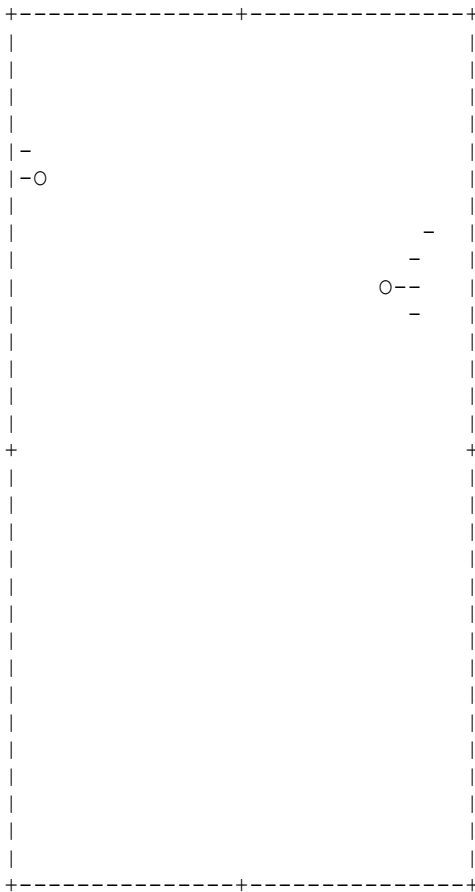


Point #369 at 40-17-52 074-09-05
 Lakewood, NJ
 Latitude 40-05-52
 Longitude 074-13-05
 Most preclusive siting
 Availability of Channel 273 (X)

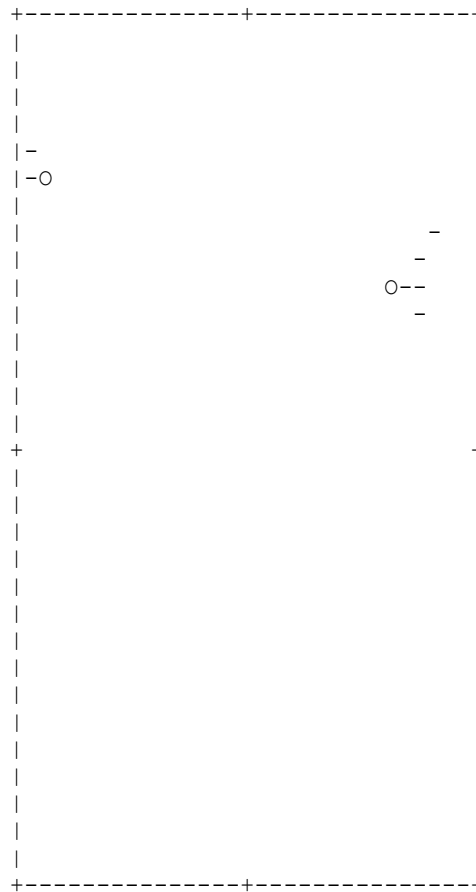




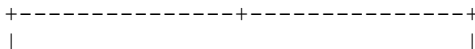
Point #219 at 39-51-52 074-05-05
 Lakewood, NJ
 Latitude 40-05-52
 Longitude 074-13-05
 Least preclusive siting
 Availability of Channel 280 (X)



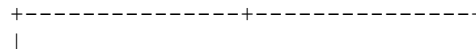
Point #219 at 39-51-52 074-05-05
 Lakewood, NJ
 Latitude 40-05-52
 Longitude 074-13-05
 Most preclusive siting
 Availability of Channel 280 (X)

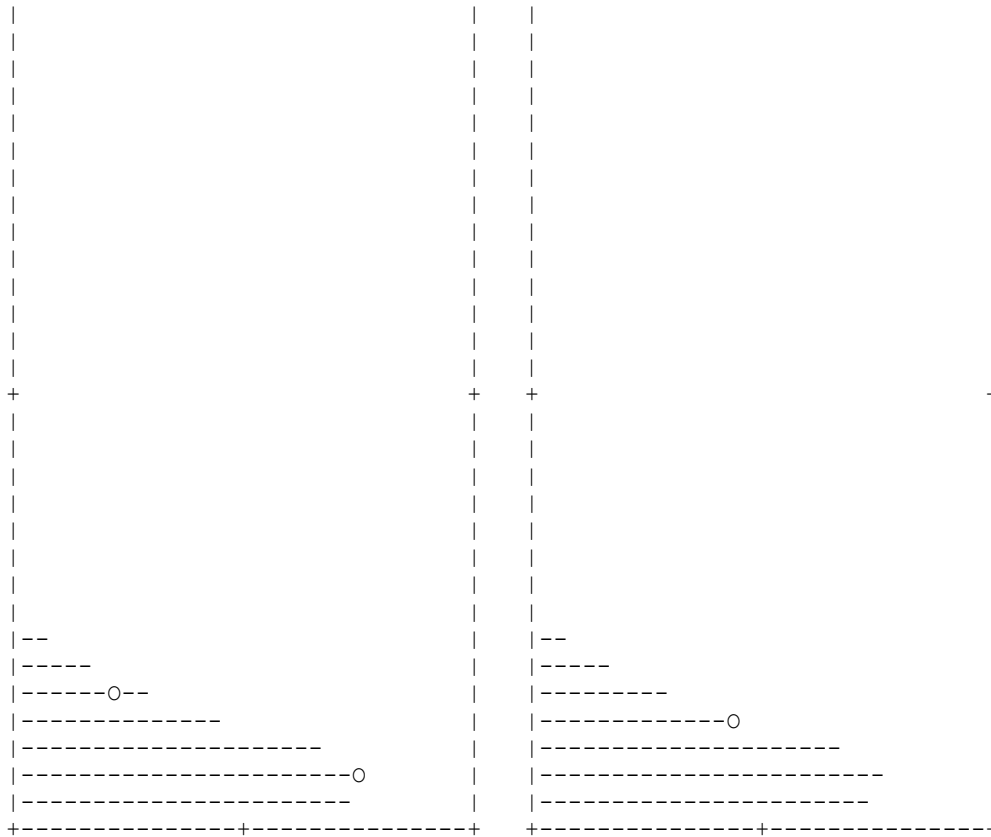


Point #925 at 40-15-52 074-27-05
 Point #177 at 40-11-52 074-03-05
 Lakewood, NJ
 Latitude 40-05-52
 Longitude 074-13-05
 Least preclusive siting
 Availability of Channel 281 (X)

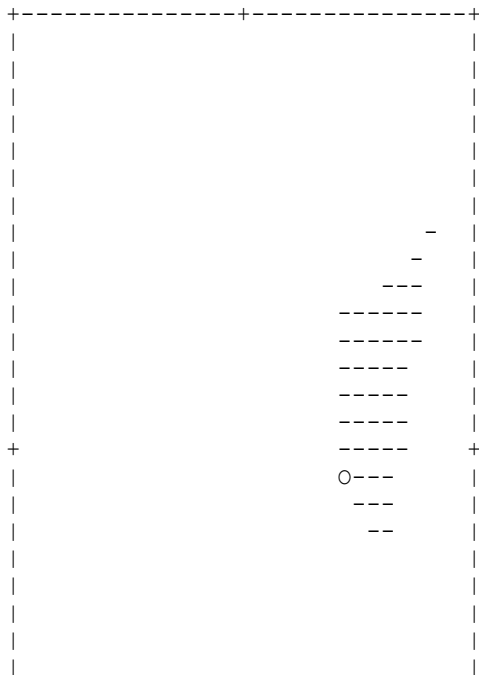


Point #177 at 40-11-52 074-03-05
 Point #925 at 40-15-52 074-27-05
 Lakewood, NJ
 Latitude 40-05-52
 Longitude 074-13-05
 Most preclusive siting
 Availability of Channel 281 (X)

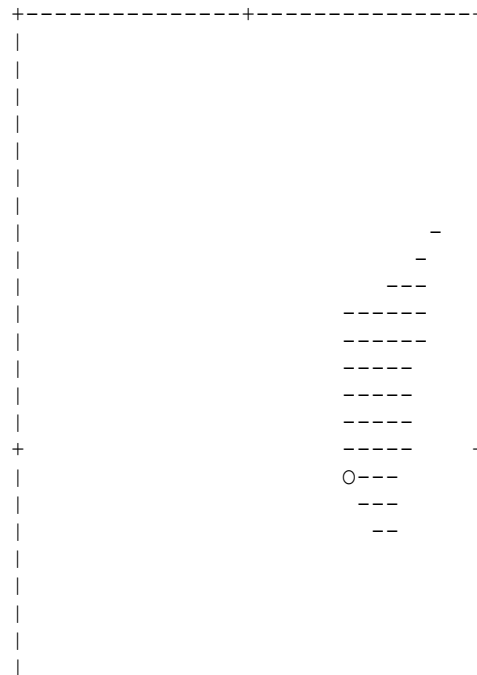




Point #219 at 39-51-52 074-05-05
 Point #749 at 39-54-52 074-22-05
 Lakewood, NJ
 Latitude 40-05-52
 Longitude 074-13-05
 Least preclusive siting
 Availability of Channel 284 (X)

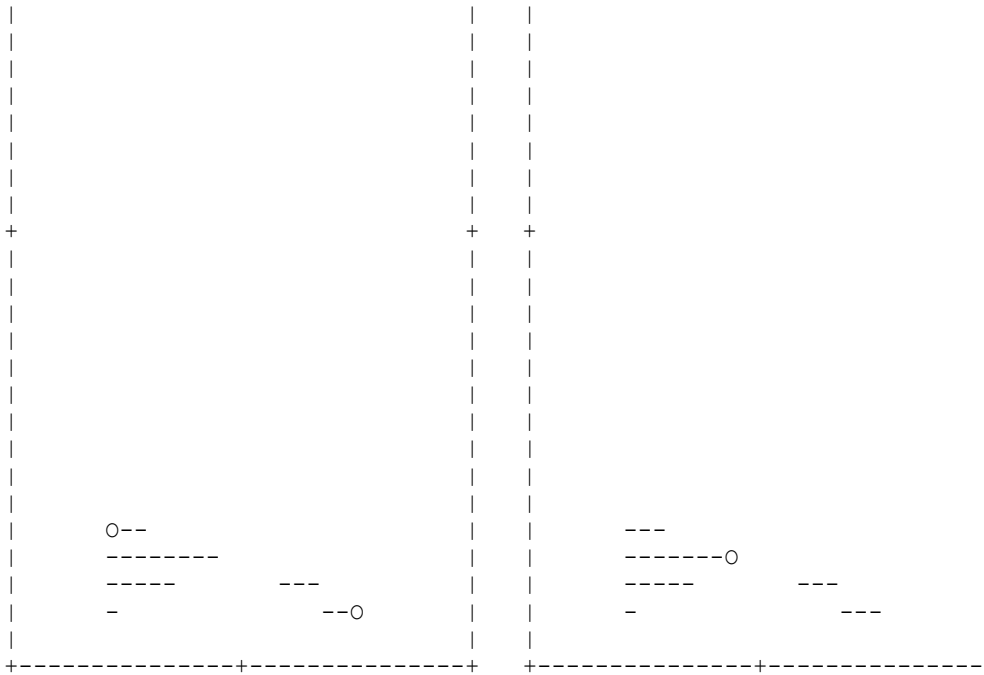


Point #531 at 39-53-52 074-15-05
 Lakewood, NJ
 Latitude 40-05-52
 Longitude 074-13-05
 Most preclusive siting
 Availability of Channel 284 (X)

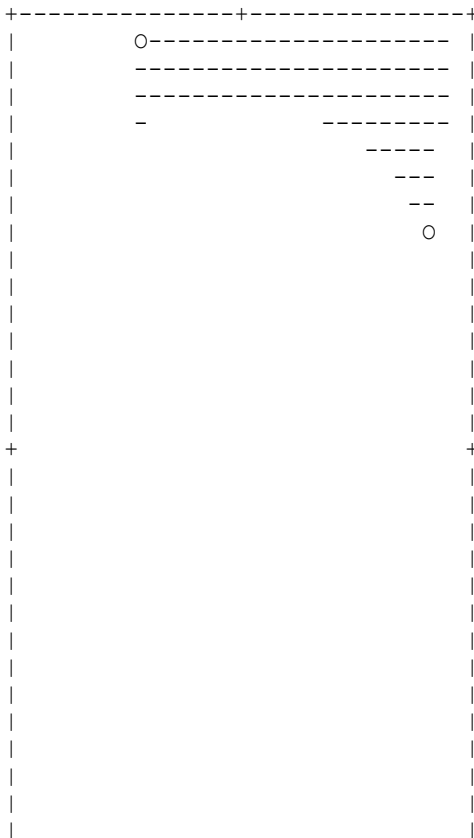


A large empty rectangular box with dashed lines and tick marks, intended for a drawing.

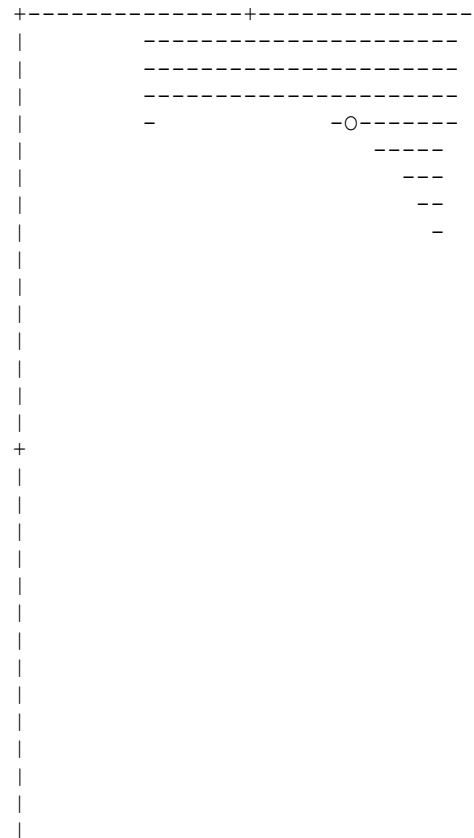
A large dashed rectangular box, intended for a drawing. It has a dashed border and a small crosshair in the top-left corner.



Point #219 at 39-51-52 074-05-05
 Point #749 at 39-54-52 074-22-05
 Lakewood, NJ
 Latitude 40-05-52
 Longitude 074-13-05
 Least preclusive siting
 Availability of Channel 300 (X)



Point #531 at 39-53-52 074-15-05
 Lakewood, NJ
 Latitude 40-05-52
 Longitude 074-13-05
 Most preclusive siting
 Availability of Channel 300 (X)



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Point #713 at 40-20-52 074-20-05
Point #086 at 40-13-52 074-00-05

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Point #276 at 40-17-52 074-06-05

END OF FIGURE 1

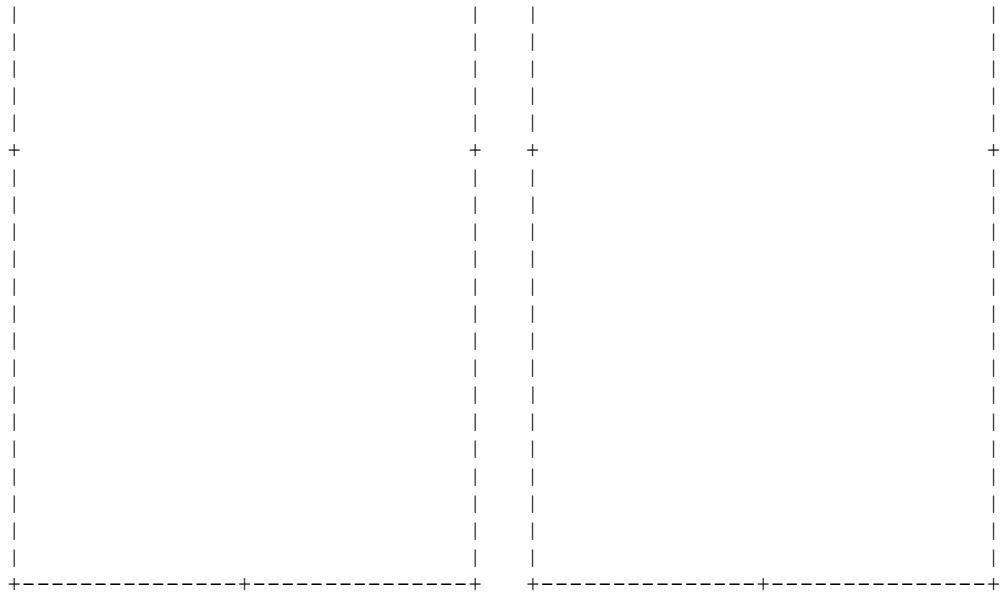
Figure 2

Atlantic City, NJ
 Latitude 39-21-51
 Longitude 074-25-24
 Grid Size 31 x 31
 Micro FM 100 Watts at 30m HAAT
 Co-Channel and 1st Adjacent Protected
 2nd Adjacent Channel Protected
 3rd Adjacent Channel Not Protected
 I.F. Not Protected
 TV Channel 6 Protected
 CP Records Protected
 APP Records Protected
 FM Translators Protected
 TV Channel 6 Translators/LP Protected
 Auc83 FX App Records Protected

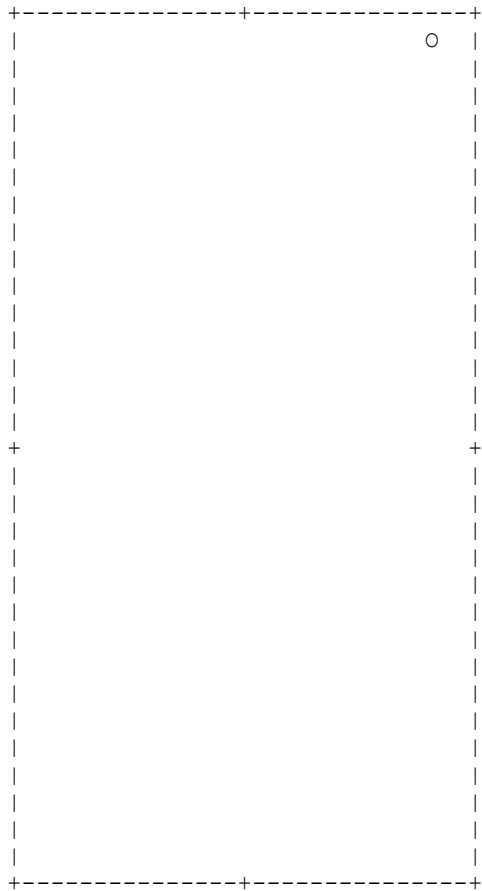
Chan	Avail	Chan	Avail	Chan	Avail	Chan	Avail	Chan	Avail
200	0	220	0	240	0	260	0	280	0
201	0	221	0	241	0	261	4	281	0
202	0	222	0	242	0	262	0	282	54
203	0	223	0	243	0	263	0	283	0
204	0	224	0	244	0	264	0	284	0
205	0	225	0	245	0	265	0	285	0
206	0	226	0	246	0	266	0	286	0
207	0	227	0	247	0	267	9	287	0
208	0	228	0	248	0	268	0	288	0
209	0	229	12	249	0	269	0	289	0
210	0	230	1	250	33	270	56	290	0
211	0	231	0	251	0	271	0	291	0
212	0	232	0	252	0	272	0	292	0
213	0	233	0	253	0	273	0	293	0
214	0	234	0	254	0	274	0	294	0
215	0	235	0	255	0	275	0	295	0
216	0	236	0	256	0	276	0	296	0
217	0	237	0	257	0	277	0	297	0
218	0	238	0	258	0	278	0	298	0
219	0	239	0	259	0	279	0	299	0
								300	220

Total		389							

Total allotments, least preclusive spacing: 12							
Total allotments, most preclusive spacing: 8							
Atlantic City, NJ				Atlantic City, NJ			
Latitude 39-21-51				Latitude 39-21-51			
Longitude 074-25-24				Longitude 074-25-24			
Least preclusive siting				Most preclusive siting			
Availability of Channel 229 (X)				Availability of Channel 229 (X)			
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Atlantic City, NJ
Latitude 39-21-51
Longitude 074-25-24
Least preclusive siting
Availability of Channel 230 (X)



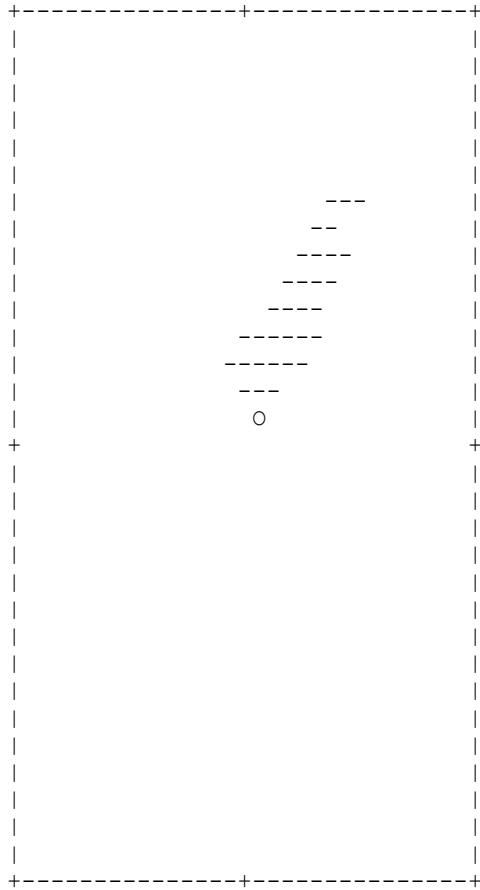
Atlantic City, NJ
Latitude 39-21-51
Longitude 074-25-24
Most preclusive siting
Availability of Channel 230 (X)



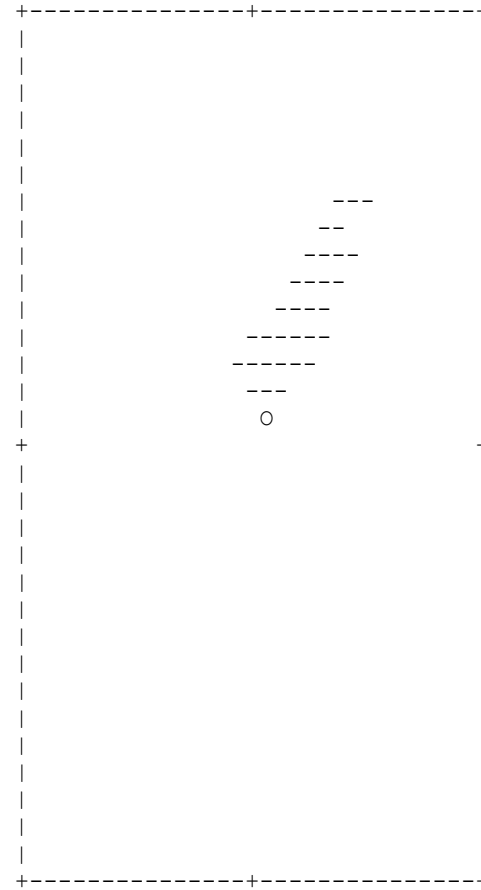
Point #093 at 39-36-51 074-12-24

Point #093 at 39-36-51 074-12-24

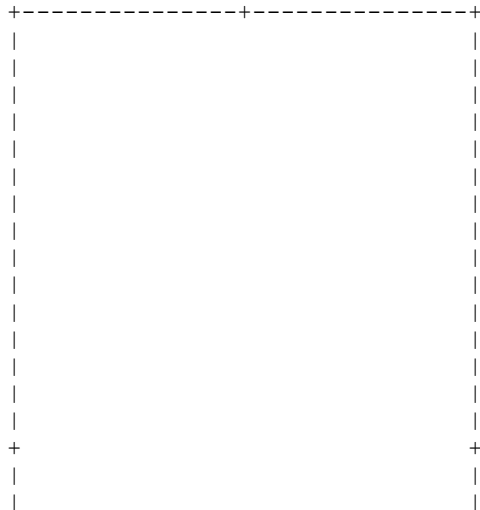
Atlantic City, NJ
 Latitude 39-21-51
 Longitude 074-25-24
 Least preclusive siting
 Availability of Channel 250 (X)



Atlantic City, NJ
 Latitude 39-21-51
 Longitude 074-25-24
 Most preclusive siting
 Availability of Channel 250 (X)

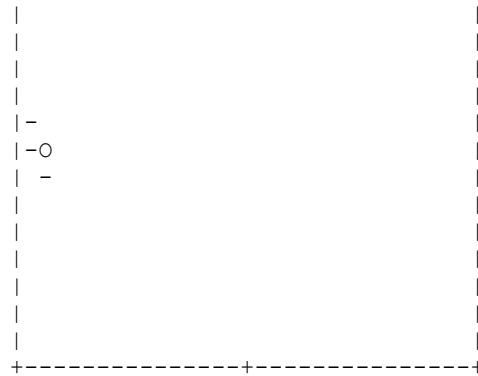


Point #451 at 39-22-51 074-24-24
 Atlantic City, NJ
 Latitude 39-21-51
 Longitude 074-25-24
 Least preclusive siting
 Availability of Channel 261 (X)



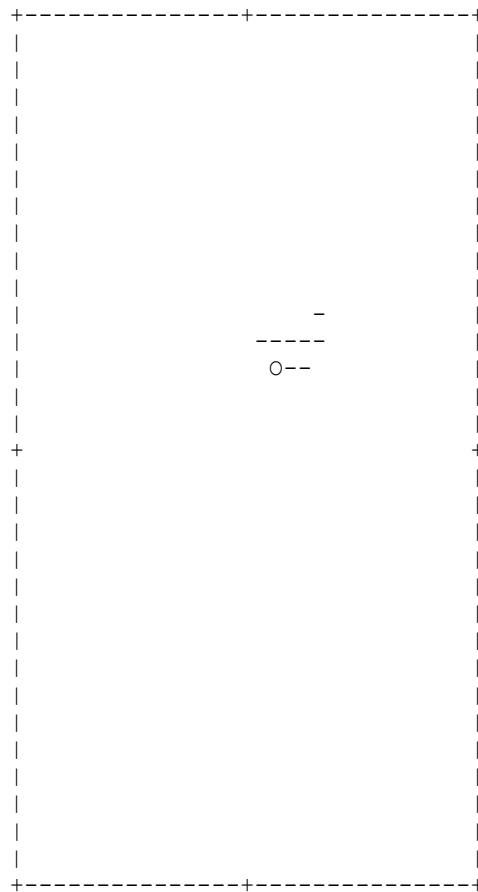
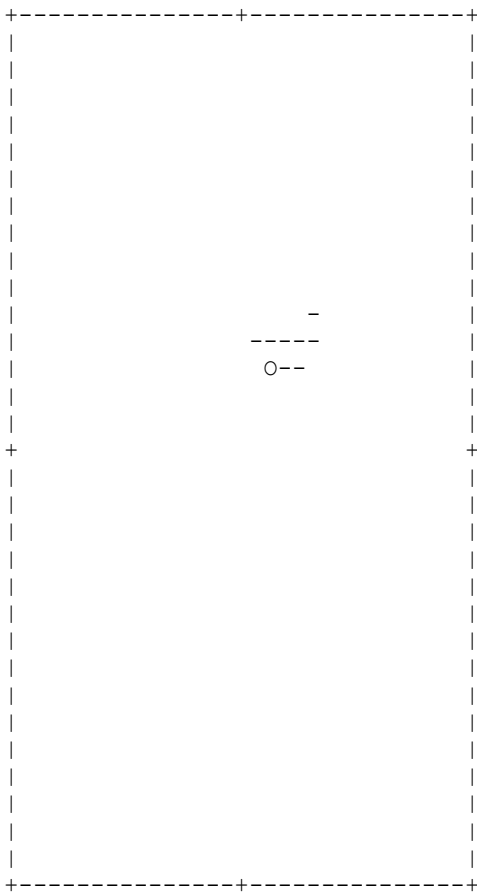
Point #451 at 39-22-51 074-24-24
 Atlantic City, NJ
 Latitude 39-21-51
 Longitude 074-25-24
 Most preclusive siting
 Availability of Channel 261 (X)





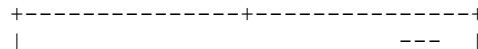
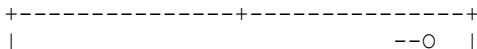
Point #907 at 39-13-51 074-39-24
 Atlantic City, NJ
 Latitude 39-21-51
 Longitude 074-25-24
 Least preclusive siting
 Availability of Channel 267 (X)

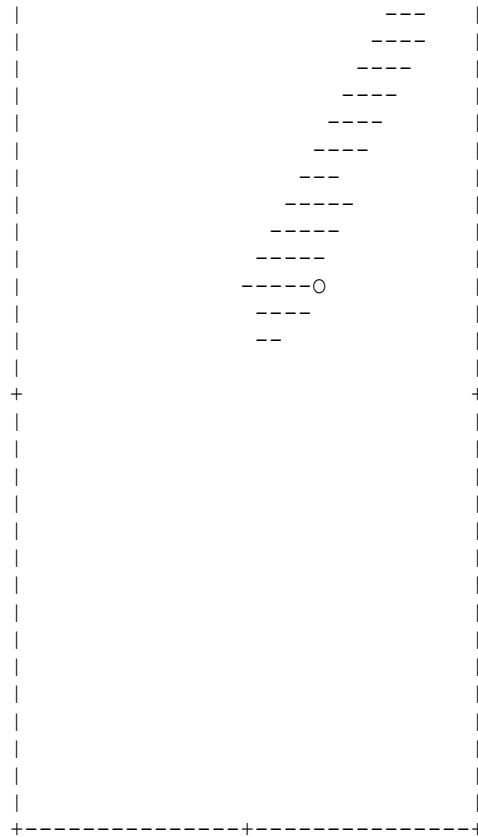
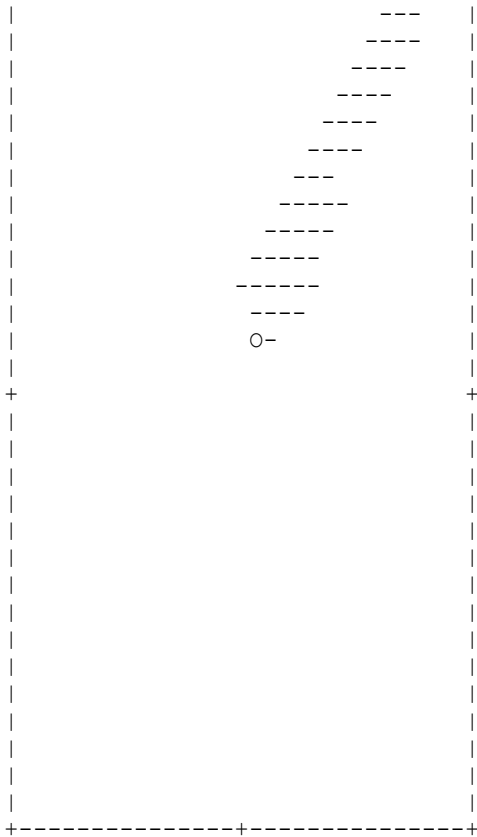
Point #907 at 39-13-51 074-39-24
 Atlantic City, NJ
 Latitude 39-21-51
 Longitude 074-25-24
 Most preclusive siting
 Availability of Channel 267 (X)



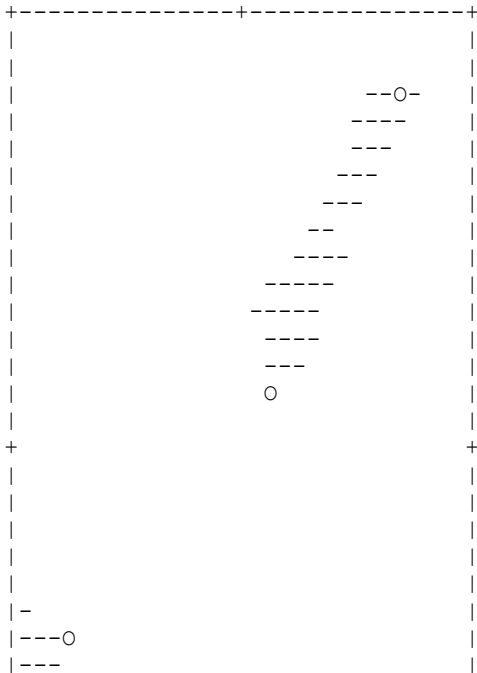
Point #422 at 39-24-51 074-23-24
 Atlantic City, NJ
 Latitude 39-21-51
 Longitude 074-25-24
 Least preclusive siting
 Availability of Channel 270 (X)

Point #422 at 39-24-51 074-23-24
 Atlantic City, NJ
 Latitude 39-21-51
 Longitude 074-25-24
 Most preclusive siting
 Availability of Channel 270 (X)

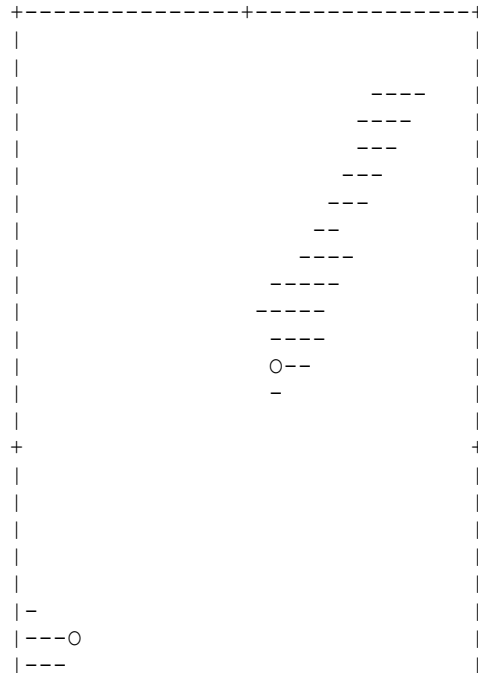


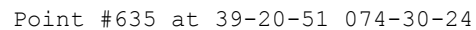
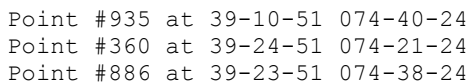
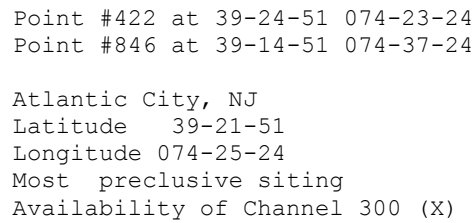
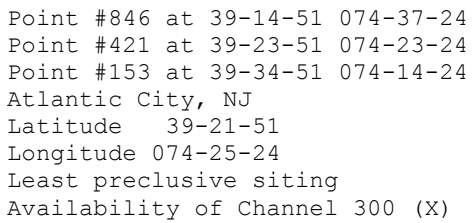


Point #093 at 39-36-51 074-12-24
 Point #452 at 39-23-51 074-24-24
 Atlantic City, NJ
 Latitude 39-21-51
 Longitude 074-25-24
 Least preclusive siting
 Availability of Channel 282 (X)



Point #330 at 39-25-51 074-20-24
 Atlantic City, NJ
 Latitude 39-21-51
 Longitude 074-25-24
 Most preclusive siting
 Availability of Channel 282 (X)





Toms River, NJ
Latitude 39-57-06
Longitude 074-12-12
Grid Size 11 x 11
Micro FM 100 Watts at 30m HAAT
Co-Channel and 1st Adjacent Protected
2nd Adjacent Channel Not Protected
3rd Adjacent Channel Not Protected
I.F. Not Protected
TV Channel 6 Protected
CP Records Protected
APP Records Protected
FM Translators Protected
TV Channel 6 Translators/LP Protected
Auc83 FX App Records Not Protected

[illegible]

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Point #057 at 39-53-06 074-12-12
Toms River, NJ
Latitude 39-57-06
Longitude 074-12-12
Least preclusive siting
Availability of Channel 281 (X)

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Point #057 at 39-53-06 074-12-12
Toms River, NJ
Latitude 39-57-06
Longitude 074-12-12
Most preclusive siting
Availability of Channel 281 (X)

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Point #057 at 39-53-06 074-12-12
Toms River, NJ
Latitude 39-57-06
Longitude 074-12-12
Least preclusive siting
Availability of Channel 299 (X)

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Point #057 at 39-53-06 074-12-12
Toms River, NJ
Latitude 39-57-06
Longitude 074-12-12
Most preclusive siting
Availability of Channel 299 (X)

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Point #035 at 39-53-06 074-10-12

Point #035 at 39-53-06 074-10-12

END OF FIGURE 3