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March 25, 1999

VIA HAND DELIVERY
Magalie R. Salas, Esq.
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Re: MM Dkt. 98-207, FM Table of Allotments
Canaseraga and Wellsville, NY

Dear Ms. Salas:

Transmitted herewith are an original and four copies of the Reply Comments To Counterproposal And Reply To Response To Reply Comments of RP Communications in the above-referenced proceeding.

If questions arise, please contact the undersigned attorney.

Sincerely,

Ann Bavender
Counsel for RP Communications

cc: Richard R. Zaragoza, Esq. (via mail)

No. of Copies rec'd 0+4
List A B C D E

ORIGINAL

BEFORE THE

FEDERAL COMMUNICATIONS COMMISSION

WASHINGTON, D.C. 20554

In the Matter of	)	
	)	
Amendment of Section 73.202(b)	)	MM Dkt. No.98-207
of the Commission's Rules,	)	RM-9408
FM Table of Allotments	)	
(Canaseraga and Wellsville, NY)	)	

To: Chief, Allocations Branch

REPLY COMMENTS TO COUNTERPROPOSAL AND REPLY TO RESPONSE TO REPLY COMMENTS

RP Communications ("RP"), by its attorneys, hereby submits its comments on the Petition For Rulemaking And Counterproposal filed by RJ Communications ("RJ") on January 25, 1999[1] ("Counterproposal") and the Response To Reply Comments ("Response") filed by RJ on March 1, 1999 in the above-captioned allotment proceeding. Therein, RP proposed that the Commission amend Section 73.202(b) of its Rules, FM Table of Allotments, to allot FM Ch. 246A to Wellsville, New York. As shown below, RJ's mutually exclusive counterproposal requesting allotment of Ch. 246A to Canaseraga, New York is technically flawed and must be rejected.

1. RJ's counterproposal is shortspaced to existing Canadian Station CIGL-FM, Ch. 246B, Belleville, Ontario, and, thus, fatally flawed. Pursuant to the U.S.-

[1]Pursuant to Public Notice Report No. 2320, released March 10, 1999, reply comments to the counterproposal are due March 25, 1999.

Canadian treaty governing FM broadcast stations within 320 km. of the U.S.-Canada border ("Treaty"),[2] RJ's proposed Class A station must be separated by a minimum of 210 km. from a Canadian Class B station. As shown in the attached Engineering Statement of Joseph M. Davis, P.E. ("Engineering Statement"), RJ's counterproposal site is 206.1 km. from CIGL-FM, 3.9 km. short of the required distance.[3] As a result, RJ's counterproposal is ineligible for simple notification under the Treaty.

2. RJ erroneously claims in the Response that if the Counterproposal does not comply with the minimum distance separations, it simply may be submitted to Canada for clearance. RJ's claim fails totally to take into account the entirety of Section 5.2.2 of the Treaty which precludes submission for technical coordination of any allotment causing objectionable interference as defined in the Treaty. As demonstrated in the Engineering Statement, the Counterproposal would result in a large area of objectionable interference and, thus, may not be submitted to Canada for technical coordination.[4] As a result the Counterproposal is unacceptable under both notification

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[2]Agreement between the Government of the United States of America and the Government of Canada concerning the use of the 88 to 108 MHZ frequency band for frequency modulation broadcasting (FM), dated February 25, 1991, as amended July 9, 1997.

[3]Although RJ claimed in its counterproposal that the proposed allotment complied with minimum distance separations to Canadian stations, RJ based its claim on distance separations used prior to the 1991 U.S.-Canadian treaty. While RJ claims that the 1991 distance separations are in the Commission's rules and RJ did not have adequate notice of the 1997 amendment to the separations, RJ failed even to comply with the 1991 distance separations. See attached Engineering Statement.

[4]RJ's claim in the Response that the Counterproposal would not result in interference pursuant to the Treaty is flawed in several aspects. RJ failed to take into account as required by the Treaty maximum facilities in determining contours, failed to utilize the contours specified in the Treaty (F(50,50) and F(50,10), and utilized contours

(distance separation) and technical coordination (contour protection) standards in the Treaty and must be returned.

3. RJ attempts belatedly to correct its fatal error by suggesting that an alternate site would comply with the Treaty. Under long-standing Commission precedent, however, "[c]ounterproposals are required to be 'technically correct and substantially complete' at the time they are filed." Cloverdale, Montgomery, and Warrior, Alabama, 12 FCC Rcd 2090 (Pol. And Rules Div. 1997).[5] Any consideration of alternate sites, therefore, must be denied.

4. Moreover, even if, arguendo, RJ could inject an alternate site into the proceeding at this late date, which it cannot (id.), the attached Engineering Statement demonstrates that no acceptable alternate site exists. The alternate site offered by RJ in the Response is unacceptable as it fails to provide principal community coverage over Canaseraga. Utilizing the expanded boundaries of Canaseraga contained in 1990 U.S. Census data, which RJ failed to take into consideration, a mere 65% of the community would be encompassed by RJ's principal community signal. Even if it could be considered, the proposed alternate site would have to be rejected on this basis alone.

5. Further, from not only the proposed alternate site, but also from any site

---

measured on a "flat earth" basis inconsistent with the principles of contour protection. See Engineering Statement.

[5]Citing e.g. Fort Bragg, California, 6 FCC Rcd 5817 (Alloc. Br. 1991); Provincetown, Dennis, Dennis Port, West Yarmouth, and Harwich Port, Massachusetts, 8 FCC Rcd 19 (Pol. and Rules Div. 1992); Sanford and Robbins, North Carolina, 12 FCC Rcd 1 (Alloc. Br. 1997).

within the small area in which a fully spaced site could be placed,[6] line of sight to Canaseraga is blocked by significant terrain features. See Engineering Statement. Specifically, in order to achieve 100 m HAAT at either the alternate site or any site within the fully spaced area, the antenna would have to be placed 233 m. above ground level necessitating a substantial tower structure. Even assuming such a tower realistically could be built near or in a State Forest, terrain obstructions between these sites and Canaseraga would preclude provision of principal community coverage over the entire community. As shown in the Engineering Statement, only 90%[7] of Canaseraga would receive the required 70 dBu signal.[8]

In conclusion, RJ's Counterproposal is shortspaced to an existing Canadian station and the shortspacing is so severe as to preclude either notification or technical coordination with Canada pursuant to the U.S.-Canadian treaty governing FM allotments within 230 km. of the U.S.-Canada border. Furthermore, consideration of alternate sites is precluded under Commission precedent requiring counterproposals to be technically correct and substantially complete at the time of filing. Moreover, even if, arguendo, alternate sites were to be considered, principal community coverage over all

---

[6]This small area is potentially further decreased by the location of a State Forest within it. See Engineering Statement.

[7]The Commission "has required 100 percent city grade coverage at the **allotment** stage." Cloverdale, Montgomery, and Warrior, Alabama, 12 FCC Rcd 2090 (Pol. And Rules Div. 1997).

[8]The "Point to Point" ("PTP") prediction methodology by which RJ attempts to show principal community coverage is not currently accepted by the Commission and broadcast engineers have recently raised serious concerns regarding any proposed use of the methodology. See Engineering Statement.

of Canaseraga cannot be provided from the alternate site proposed by RJ or from any site in the small area within which a fully spaced site could be located. Accordingly, RJ's counterproposal must be denied as unacceptable.

WHEREFORE, for the foregoing reasons, the Commission should reject RJ's counterproposal and expeditiously amend Section 73.202(b) of its rules to allot FM Channel 246A to Wellsville, New York.

Respectfully submitted,

RP COMMUNICATIONS

By: _____
Howard M. Weiss
Ann Bavender
Its Attorneys

Fletcher, Heald & Hildreth, P.L.C.
1300 N. 17th Street, 11th Floor
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March 25, 1999

Engineering Statement

Comments to Counterproposal
and Reply to Response to Reply Comments
RE: Amendment to the FM Table of Allotments (§73.202(b))
Counterproposal for Channel 246A at Canaseraga, New York
prepared for
RP Communications

Introduction

This engineering statement supports *RP Communications' ("RPC")* response to *RJ Communications' ("RJ")* **Response to Reply Comments**, regarding a counterproposal that Channel 246A be allotted to Canaseraga, New York. The counterproposal is mutually exclusive with the pending *RPC* petition to allot Channel 246A to Wellsville, New York.

Discussion

As previously described (in our Engineering Statement dated February 9, 1999), *RJ's* proposed allotment point for Canaseraga (North Latitude 42° 21' 41" West Longitude 77° 45' 09") is located 11.3 km south-southeast of Canaseraga. This site does not meet the minimum distance requirements with respect to Canadian station CIGL-FM (Ch. 246B, Belleville, ON). Under Section 2.4 of the present United States - Canadian agreement,[1] a minimum distance of 210 km is required between co-channel Class A and B FM stations. *RJ's* site is 206.1 km from CIGL-FM, which is 3.9 km short of the required distance. Under the prior minimum separation distance table (as still shown in §73.207(b)(2) Table 2 of the Commission's rules), a distance of 223 km was required. The allotment site is 16.9 km short of the previously required distance. Thus, *RJ's* allotment point, at a distance of 206.1 km from CIGL-FM, does not satisfy the current or prior Canadian agreements.

Section 5.2.2 of the Canadian agreement permits the use of contour protection for allotments not conforming to the minimum distance requirements. In its response, *RJ* states that contour protection may be used to make the allotment site comply with the Canadian agreement (although the original counterproposal did not request processing under contour protection criteria), and supplies a map suggesting that there is no contour overlap. However, when the appropriate contours

[1] See *Agreement between the Government of the United States of America and the Government of Canada concerning the use of the 88 to 108 MHz frequency band for frequency modulation broadcasting (FM)*, dated February 25, 1991 as amended July 9, 1997; FCC IN 97-22, DA 97-1595, July 28, 1997.

are determined as specified in Section 5.2.2 of the Canadian agreement, there is considerable overlap.

Specifically, under Section 5.2.2 of the Canadian agreement, the contours are to be determined assuming maximum facilities. As a Class B station, the maximum CIGL-FM facility is 50 kW effective radiated power (ERP) at 150 meters antenna height above average terrain (HAAT). The Class A Channel 246A counterproposal maximum facility is 6 kW ERP at 100 m HAAT (*RJ* does not request that the Channel 246A's ERP be limited towards CIGL-FM). Further, under the Canadian agreement, each station's 54 dBμ F(50,50) and 34 dBμ F(50,10) contours are considered to be the protected and interfering contours, respectively. (The map within *RJ's* response showed the Channel 246A protected contour and the CIGL-FM interfering contour as 60 dBμ and 40 dBμ, respectively.) As depicted in the attached **Figure 1**, the CIGL-FM interfering 34 dBμ contour overlaps the protected 54 dBμ Canaseraga Channel 246A contour. The entire area of this overlap, 542 square km, falls entirely over U.S. land area. This contour overlap therefore does not comply with Section 5.2.2 of the Canadian agreement for contour protection.[2]

It should also be noted that the contours shown in *RJ's* response were determined on a "flat earth" basis. Minimum distance separation requirements are generally based on a "flat earth" basis, with some additional margin of protection provided by some extra distance. When these minimum distances are not met, contour protection may be used in some cases to demonstrate required interference protection between short-spaced facilities. The concept of contour protection, however, is based on the use of the actual transmitted power and antenna height above average terrain along each azimuthal radial to determine contour distances (assuming the maximum facility for each class). The use of a "flat earth" showing for contour protection is inconsistent with the principles of contour protection. Together, the use of the incorrect protected and interfering contour levels along with a "flat earth" analysis resulted in *RJ's* faulty conclusion that there is no contour overlap.

[2]Although U.S. Class A stations are protected to their 60 dBμ contour from other domestic stations when contour protection is used, the Canadian agreement specifically states that Class A stations are to be protected to their 54 dBμ F(50,50) contour from overlap by the foreign station's 34 dBμ F(50,10) contour.

Thus, the allotment point proposed by *RJ* in its counterproposal *does not meet minimum distance spacing* to CIGL-FM, and it *does not meet contour protection requirements* to CIGL-FM as specified in the Canadian agreement.

Alternate Allotment Point

In its response, *RJ* also supplies for the first time an alternate allotment point for its Channel 246A counterproposal (at 42° 19' 38" N, 77° 43' 47" W). This allotment point is fully spaced to CIGL-FM and other pertinent allotments and facilities. However, as shown in the attached **Figure 2**, a 16.2 km radius from this point (corresponding to standard principal community coverage from an allotment point for a maximum Class A facility) does not encompass Canaseraga. Only 65 percent of the area of Canaseraga is covered (2.15 sq km out of a total area of 3.31 sq km) by the 16.2 km radius. (The boundaries of Canaseraga as shown in **Figure 2** are based on 1990 U.S. Census data.) Thus, the alternate allotment point does not meet the Commission's criteria for principal community coverage.

In the February 9, 1999 Engineering Statement for *RPC*, the undersigned stated that there is a fully-spaced site area for Channel 246A. As stated therein, the minimum distance spacing requirements to other stations and a 16.2 km Class A standard principal community contour radius from Canaseraga results in a very small possible area to locate an allotment point. *RJ's* alternate allotment point is near, but not within, this area. A portion of this site area is shown as a State Forest, according to U.S.G.S. topographic map data (see **Figure 2**), and consequently this portion may not be an appropriate allotment point due to environmental and permitting concerns.

From locations within this fully spaced site area, line of sight to Canaseraga is blocked by significant terrain features (as stated in the February 9, 1999 Engineering Statement in regard to this fully spaced area). Due to the very small size of the fully-spaced site area, it is possible to evaluate the resulting coverage that may be afforded from a fully-spaced transmitter site. In order for an antenna 100 m HAAT to be achieved from *RJ's* alternate site, an antenna elevation of 233 meters above ground level would be required (necessitating a substantial tower structure). Candidate locations actually considered within the fully-spaced site area would also require such a substantial

structure to achieve 100 meters HAAT. Assuming such a structure could be built, the attached **Figure 3** depicts the terrain profile from *RJ's* alternate site to Canaseraga. Using the terrain-dependent Longley-Rice prediction methodology,[3] as shown in **Figure 2**, Canaseraga is not entirely covered with 70 dBμ predicted signal levels for a 233 m above ground level antenna (100 m HAAT) with 6 kW ERP. Specifically, only 90 percent of the area of Canaseraga is covered with signal levels of at least 70 dBμ.

RJ relies on the Commission's proposed "Point to Point" ("PTP") prediction methodology[4] to suggest that there is no problem with principal community coverage of Canaseraga from the original and the alternate allotment points. However, in informal conversations, the Commission's staff has indicated that the PTP program is not currently being used to evaluate principal community coverage. Staff continues to accept showings based on the NTIA's ITM program, as supplied herein. In comments filed regarding the Commission's PTP program, numerous knowledgeable and respected engineers have raised questions concerning the results generated by the program.[5] Thus, the Commission's PTP method is not believed to be acceptable at this juncture to assure principal community coverage.

Conclusion

The counterproposal filed by *RJ* to allot Channel 246A to Canaseraga does not meet minimum distance separation or contour protection requirements with respect to Canadian station CIGL-FM. The alternate allotment site advanced by *RJ* does not meet standard allotment criteria

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[3]The implementation of Longley-Rice was the Irregular Terrain Model ("ITM") developed by the National Telecommunications and Information Administration. The ITM implementation used was that which is available through the "Communications System Performance Model" program provided by the NTIA time-shared computer service "TA Service" in Boulder, Colorado. The ITM is based upon the Longley-Rice propagation model, which uses the methods described in the National Bureau of Standards Technical Note 101. A summary of computer input data is provided in **Table 1**.

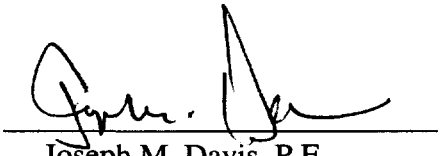
[4]See *1998 Biennial Regulatory Review — Streamlining of Radio Technical Rules in Parts 73 and 74 of the Commission's Rules,* MM Docket No. 98-93, released June 15, 1998

[5]For example, see comments to MM Docket No. 98-93 filed by the Association of Federal Communications Consulting Engineers, Hatfield & Dawson, Inc., and the National Association of Broadcasters.

regarding principal community coverage to Canaseraga. Additional problems with the possible allotment to Canaseraga involve the lack of line of sight coverage to Canaseraga from any fully-spaced location and the existence of State Forest land within a portion of the small allotment point area.

Certification

Under penalty of perjury, the undersigned hereby certifies that the foregoing statement was prepared by him or under his direction, and that it is true and correct to the best of his knowledge and belief. Mr. Davis is a principal in the firm of *Cavell, Mertz & Davis, Inc.*, is a Registered Professional Engineer in Virginia, holds a Bachelor of Science degree from Old Dominion University in Electrical Engineering Technology, and has submitted numerous engineering exhibits to various local governmental authorities and the Federal Communications Commission. His qualifications are a matter of record with that agency.



Joseph M. Davis, P.E.
March 25, 1999

Cavell, Mertz & Davis, Inc.
10300 Eaton Place Suite 200
Fairfax, VA 22030
(703) 591-0110

Table 1

LONGLEY-RICE INPUT DATA SUMMARY

prepared for

RP Communications

Communications System Performance Model
Input Summary
23-Mar-99 14:16:37

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1)	Model:	Point-to-point irregular terrain model
2)	Output option:	Field intensity
3)	Length units:	Metric (km and m)
4)	Service Application:	Broadcast
5)	Results option:	WWW 13 5
	FAX number:	703-591-0115
	Email address:	
6)	Location variability:	50.00 %
7)	Time availability:	50.00 %
8)	Situation variability:	50.00 %
10)	Frequency:	97.100 MHz
11)	Polarization:	Horizontal
12)	Conductivity:	.005 S/m
13)	Dielectric constant:	15.0
14)	Climate zone:	Continental temperate
20)	Transmitter name:	Alt Site Ch.246A
21)	Transmitter location:	

Latitude Deg N		Longitude Deg W	
42.3272	42,19,38.0	77.7297	77,43,47.0

22)	Xmtr site elevation:	397.6 m	1304.3 ft
23)	Xmtr ant ht AMSL:	630.10 m	2067.26 ft
23)	Xmtr ant ht AGL:	232.54 m	762.94 ft
24)	Transmitter radiation option:		ERP
24)	Effective Radiated Power:		6000.0 W
	Effective Isotropic Radiated Power:		9843.5 W
30)	Transmitter ant horiz pattern:		Omnidirectional
32)	Transmitter ant vert pattern:		Omnidirectional
40)	Rcvr ant ht above ground:	9.10 m	29.86 ft
56)	Corporate name:		Cavell, Mertz & Davis, Inc.
57)	Color option:		Color
58)	Scale option:		No Scale
59)	Quality option:		High
60)	Plot name:		Alt Site - Ch. 246A
62)	Plot center:		

Latitude Deg N		Longitude Deg W	
42.3272	42,19,38.0	77.7297	77,43,47.0

63)	Plot size: (side length)	50.00 km	31.07 mi
64)	Plot Roads option:	No roads	
66)	Field intensity contour levels:		
		1) 70.00 dBuV/m	
66)	Contour Legend label:	Field Intensity(dBuV/m)	
66)	Contour labels and colors: (B&W device uses symbols)		

	Contour levels	Labels	Colors
1	Less than 70.00	Less than 70.00	Purple
2	Greater than 70.00	Greater than 70.00	Clear

67)	Political boundaries:	County and State
68)	Landmarks:	None

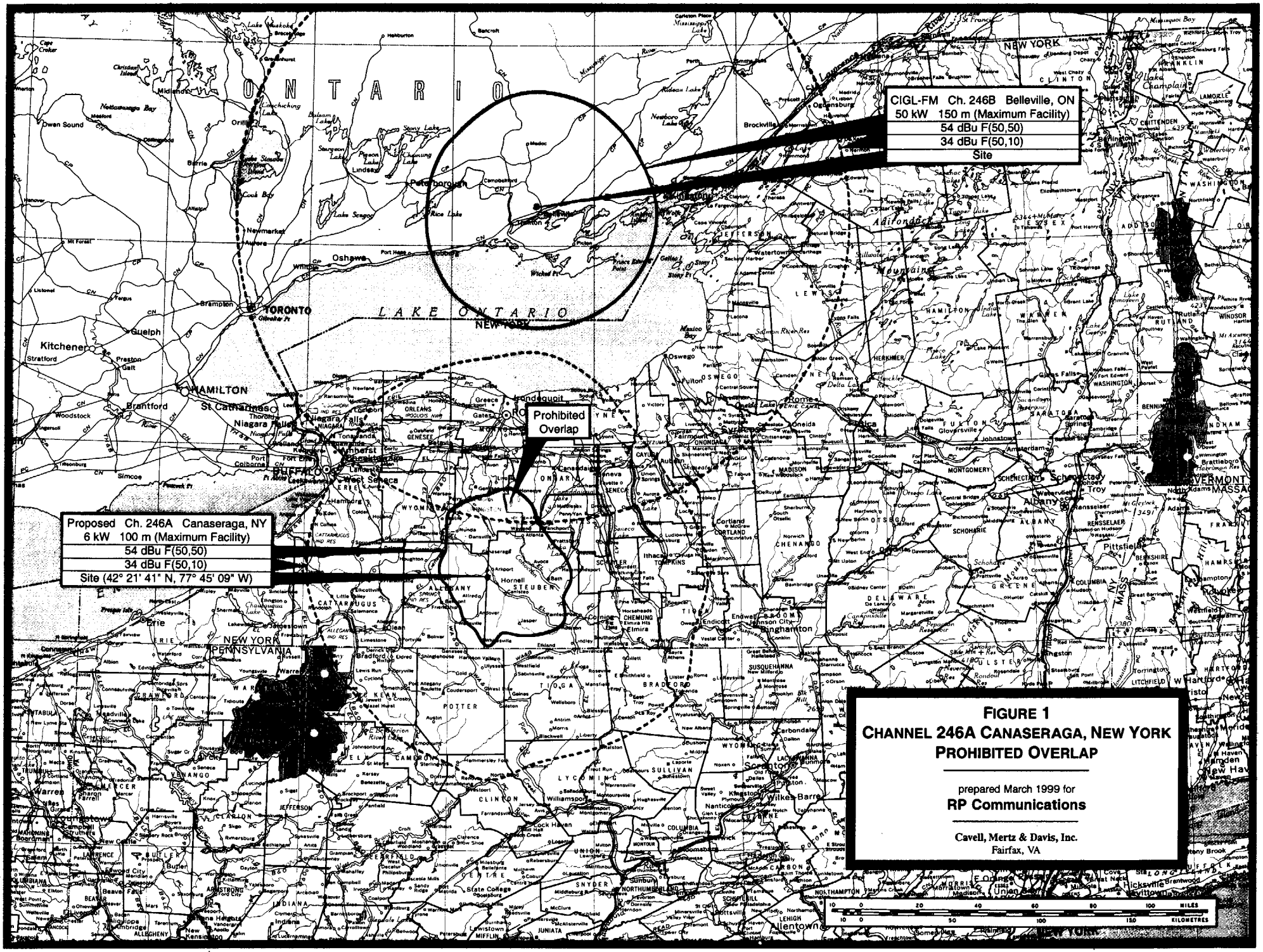


FIGURE 1
CHANNEL 246A CANASERAGA, NEW YORK
PROHIBITED OVERLAP

prepared March 1999 for
RP Communications

Cavell, Mertz & Davis, Inc.
Fairfax, VA

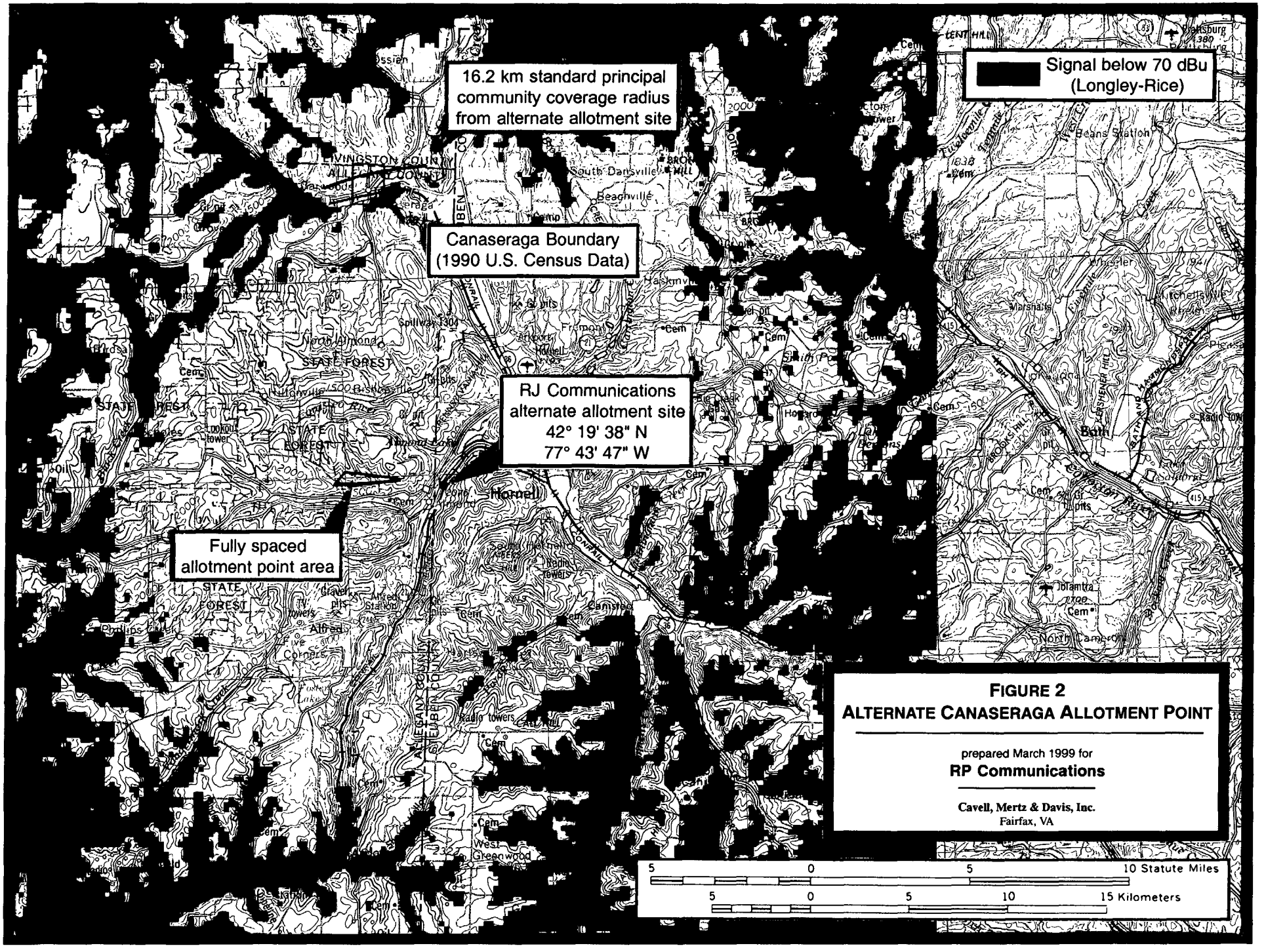


FIGURE 2
ALTERNATE CANASERAGA ALLOTMENT POINT

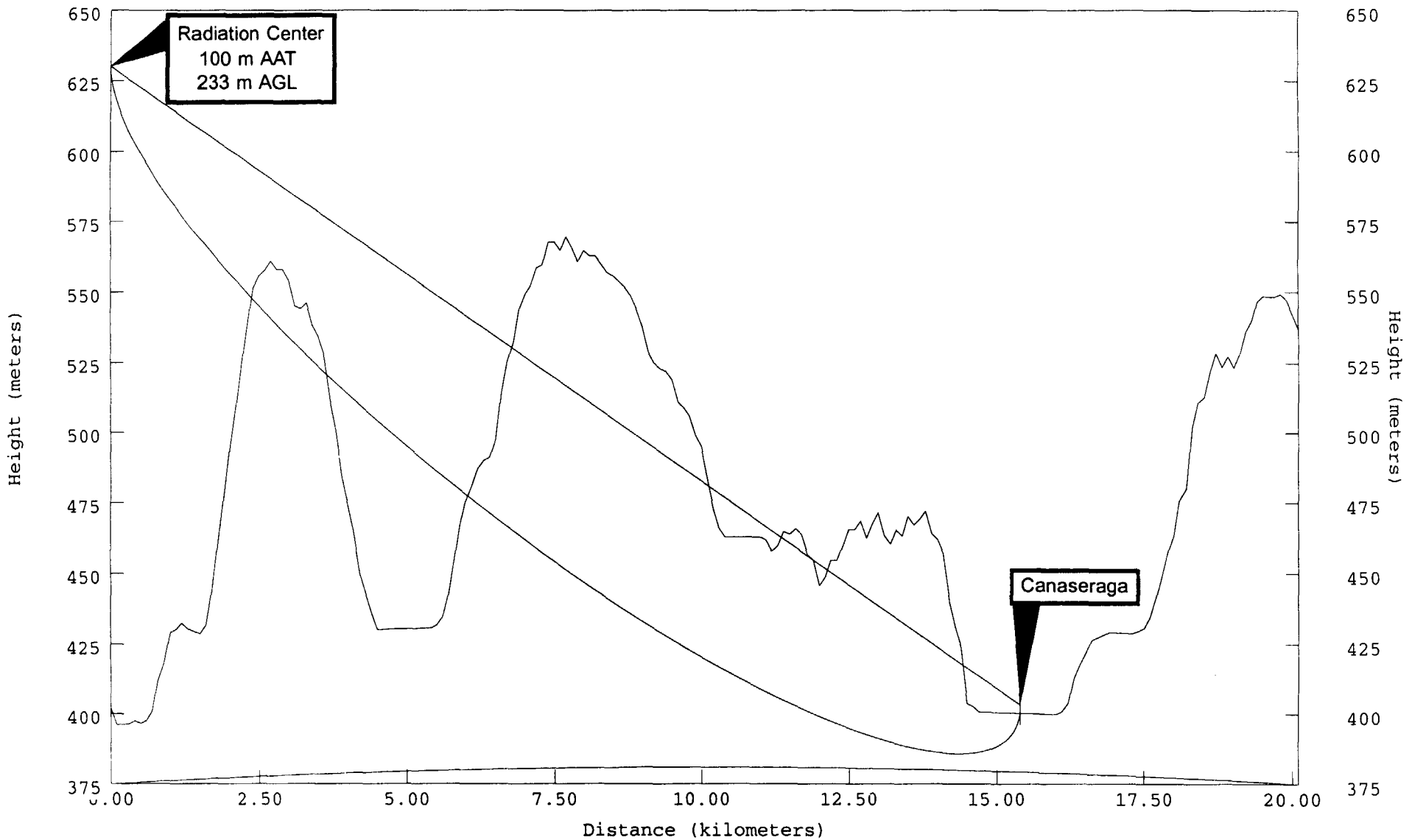
prepared March 1999 for
RP Communications

Cavell, Mertz & Davis, Inc.
Fairfax, VA

FIGURE 3
TERRAIN PROFILE FROM ALTERNATE SITE TO CANASERAGA

prepared March 1999 for
RP Communications

Cavell, Mertz & Davis, Inc.
Fairfax, VA



CERTIFICATE OF SERVICE

I, Stacy Eveslage, a secretary in the law firm of Fletcher, Heald & Hildreth, P.L.C., hereby certify that on this 25th day of March, 1999, copies of the foregoing Reply Comments to Counterproposal and Reply to Response to Reply Comments were sent by first class mail, postage prepaid, to the following:

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Colette M. Capretz
Fisher Wayland Cooper Leader & Zaragoza
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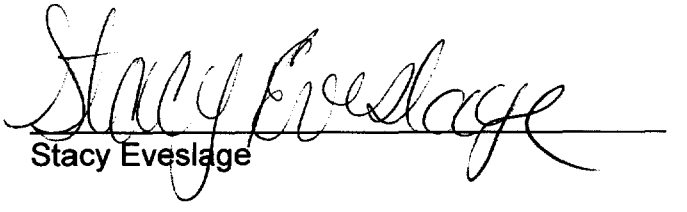
Suite 400
Washington, DC 20006



Stacy Eveslage