10. Is a directional antenna proposed? ☐ Yes ☒ No

If Yes, attach as an Exhibit a statement with all data specified in 47 C.F.R. Section 73.316, including plot(s) and tabulations of horizontally and vertically polarized radiated components in terms of relative field. Exhibit No.

11. Will the main studio be located within the 70 dBu or 3.16 mV/m contour? ☒ Yes ☐ No

If No, attach as an Exhibit justification pursuant to 47 C.F.R. Section 73.1125. Exhibit No.

12. Are there: (a) within 60 meters of the proposed antenna, any proposed or authorized FM or TV transmitters, or any nonbroadcast *(except citizens band or amateur)* radio stations; or (b) within the blanketing contour, any established commercial or government receiving stations, cable head-end facilities, or populated areas; or (c) within ten (10) kilometers of the proposed antenna, any proposed or authorized FM or TV transmitters which may produce receiver-induced intermodulation interference? ☐ Yes ☒ No

If Yes, attach as an Exhibit a description of any expected, undesired effects of operations and remedial steps to be pursued if necessary, and a statement accepting full responsibility for the elimination of any objectionable interference (including that caused by receiver-induced or other types of modulation) to facilities in existence or authorized or to radio receivers in use prior to grant of this application. *(See 47 C.F.R. Sections 73.315(b), 73.316(d) and 73.318.)* Exhibit No.

13. Attach as an Exhibit a 7.5 minute series U.S. Geological Survey topographic quadrangle map that shows clearly, legibly, and accurately, the location of the proposed transmitting antenna. This map must comply with the requirements set forth in Instruction D for Section V. Further, the map must clearly and legibly display the original printed contour lines and data as well as latitude and longitude markings, and must bear a scale of distance in kilometers. Exhibit No. E-2

14. Attach as an Exhibit *(name the source)* a map which shows clearly, legibly, and accurately, and with the original printed latitude and longitude markings and a scale of distance in kilometers: Exhibit No. E-3

(a) the proposed transmitter location, and the radials along with profile graphs have been prepared;

(b) the 1 mV/m predicted contour and, for noncommercial educational applicants applying on a commercial channel, the 3.16 mV/m contour; and

(c) the legal boundaries of the principal community to be served.

15. Specify area in square kilometers (1 sq. mi. = 2.59 sq. km.) and population (latest census) within the predicted 1 mV/m contour.

Area 1,363.3 sq. km. Population 227,851

16. Attach as an Exhibit a map *(Sectional Aeronautical charts where obtainable)* showing the present and proposed 1 mV/m (60 dbu) contours. Exhibit No.

Enter the following from Exhibit above: Gain Area _____ sq. mi.
Loss Area _____ sq. mi.

Percent change (gain area plus loss area as percentage of present area) _____ %.
If 50% or more this constitutes a major change. Indicate in question 2(c), Section I, accordingly.

17. For an application involving an auxiliary facility only, attach as an Exhibit a map *(Sectional Aeronautical Chart or equivalent)* that shows clearly, legibly, and accurately, and with latitude and longitude markings and a scale of distance in kilometers: Exhibit No.

(a) the proposed auxiliary 1 mV/m contour; and

(b) the 1 mV/m contour of the licensed main facility for which the applied-for facility will be auxiliary. Also specify the file number of the license. See 47 C.F.R. Section 73.1675. (File No.: _____)

18. Terrain and coverage data *(to be calculated in accordance with 47 C.F.R. Section 73.313).*

Source of terrain data: *(check only one box below)*

[X] Linearly interpolated 30-second database [ ] 7.5 minute topographic map

(Source: NGDC)

[ ] Other *(briefly summarize)*

Radial bearing (degrees True)	Height of radiation center above average elevation of radial from 3 to 16 km (meters)	Predicted Distances to the 1 mV/m contour (kilometers)
0	See Exhibit E-4	
45		
90		
135		
180		
225		
270		
315		

Allocation Studies

(See Subpart C of 47 C.F.R. Part 73)

19. Is the proposed antenna location within 320 kilometers (199 miles) of the common border between the United States and Mexico? [ ] Yes [X] No

If Yes, attach as an Exhibit a showing of compliance with all provisions of the Agreement between the United States of America and the United Mexican States concerning Frequency Modulation Broadcasting in the 88 to 108 MHz band. Exhibit No.

20. Is the proposed antenna location within 320 kilometers of the common border between the United States and Canada? [X] Yes [ ] No

If Yes, attach as an Exhibit a showing of compliance with all provisions of the Working Agreement for Allocation of FM Broadcasting Stations on Channels 201-300 under The Canada-United States FM Agreement of 1947. Exhibit No. E-5

21. If the proposed operation is for a channel in the range from channel 201 through 220 (88.1 through 91.9 MHz), or if this proposed operation is for a class D station in the range from Channel 221 through 300 (92.1 through 107.9 MHz), attach as an Exhibit a complete allocation study to establish the lack of prohibited overlap of contours with other U.S. stations. The allocation study should include the following: Exhibit No. E-5

(a) The normally protected interference-free and the interfering contours for the proposed operation along all azimuths.
(b) Complete normally protected interference-free contours of all other proposals and existing stations to which objectionable interference would be caused.
(c) Interfering contours over pertinent arcs of all other proposals and existing stations from which objectionable interference would be received.
(d) Normally protected and interfering contours over pertinent arcs, of all other proposals and existing stations, which require study to show the absence of objectionable interference.
(e) Plot of the transmitter location of each station or proposal requiring investigation, with identifying call letters, file numbers and operating or proposed facilities.
(f) When necessary to show more detail, an additional allocation study will be attached utilizing a map with a larger scale to clearly show interference or absence thereof.
(g) A scale of kilometers and properly labeled longitude and latitude lines, shown across the entire Exhibit(s). Sufficient lines should be shown so that the location of the sites may be verified.
(h) The name of the map(s) used in the Exhibit(s).

22. With regard to any stations separated by 53 or 54 channels (10.6 or 10.8 MHz) attach as an Exhibit information required in 1/ *(separation requirements involving intermediate frequency (i.f.) interference).* Exhibit No. E-5

23.(a) Is the proposed operation on Channel 218, 219, or 220? [X] Yes [ ] No

(b) If the answer to (a) is yes, does the proposed operation satisfy the requirements of 47 C.F.R. Section 73.207? [X] Yes [ ] No

(c) If the answer to (b) is yes, attach as an Exhibit information required in 1/ regarding separation requirements with respect to stations on Channels 221, 222 and 223. Exhibit No. E-5

(d) If the answer to (b) is no, attach as an Exhibit a statement describing the short spacing(s) and how it or they arose. Exhibit No.

1/ A showing that the proposed operation meets the minimum distance separation requirements. Include existing stations, proposed stations, and cities which appear in the Table of Allotments; the location and geographic coordinates of each antenna, proposed antenna or reference point, as appropriate; and distance to each from proposed antenna location.

(e) If authorization pursuant to 47 C.F.R. Section 73.215 is requested, attach as an Exhibit a complete engineering study to establish the lack of prohibited overlap of contours involving affected stations. The engineering study must include the following:

Exhibit No.

(1) Protected and interfering contours, in all directions (360°), for the proposed operation.
(2) Protected and interfering contours, over pertinent arcs, of all short-spaced assignments, applications and allotments, including a plot showing each transmitter location, with identifying call letters or file numbers, and indication of whether facility is operating or proposed. For vacant allotments, use the reference coordinates as transmitter location.
(3) When necessary to show more detail, an additional allocation study utilizing a map with a larger scale to clearly show prohibited overlap will not occur.
(4) A scale of kilometers and properly labeled longitude and latitude lines, shown across the entire exhibit(s). Sufficient lines should be shown so that the location of the sites may be verified.
(5) The official title(s) of the map(s) used in the exhibits(s).

24. Is the proposed station for a channel in the range from Channel 201 to 220 (88.1 through 91.9 MHz) and the proposed antenna location within the distance to an affected TV Channel 6 station(s) as defined in 47 C.F.R. Section 73.525? ☐ Yes ☒ No

If Yes, attach as an Exhibit either a TV Channel 6 agreement letter dated and signed by both parties or a map and an engineering statement with calculations demonstrating compliance with 47 C.F.R. Section 73.525 for each affected TV Channel 6 station. Exhibit No.

25. Is the proposed station for a channel in the range from Channel 221 to 300 (92.1-107.9 MHz)? ☐ Yes ☒ No

If Yes, attach as an Exhibit information required in 1/. *(Except for Class D (secondary) proposals.)* Exhibit No.

26. Environmental Statement *(See 47 C.F.R. Section 1.1301 et seq.)*

Would a Commission grant of this application come within Section 1.1307 of the FCC Rules, such that it may have a significant environmental impact? ☐ Yes ☒ No

If you answer Yes, submit as an Exhibit an Environmental Assessment required by Section 1.1311. Exhibit No.

If No, explain briefly why not.
The proposed construction does not require any action covered by Section 1.1307 of the Rules.

CERTIFICATION

I certify that I have prepared this Section of this application on behalf of the applicant, and that after such preparation, I have examined the foregoing and found it to be accurate and true to the best of my knowledge and belief.

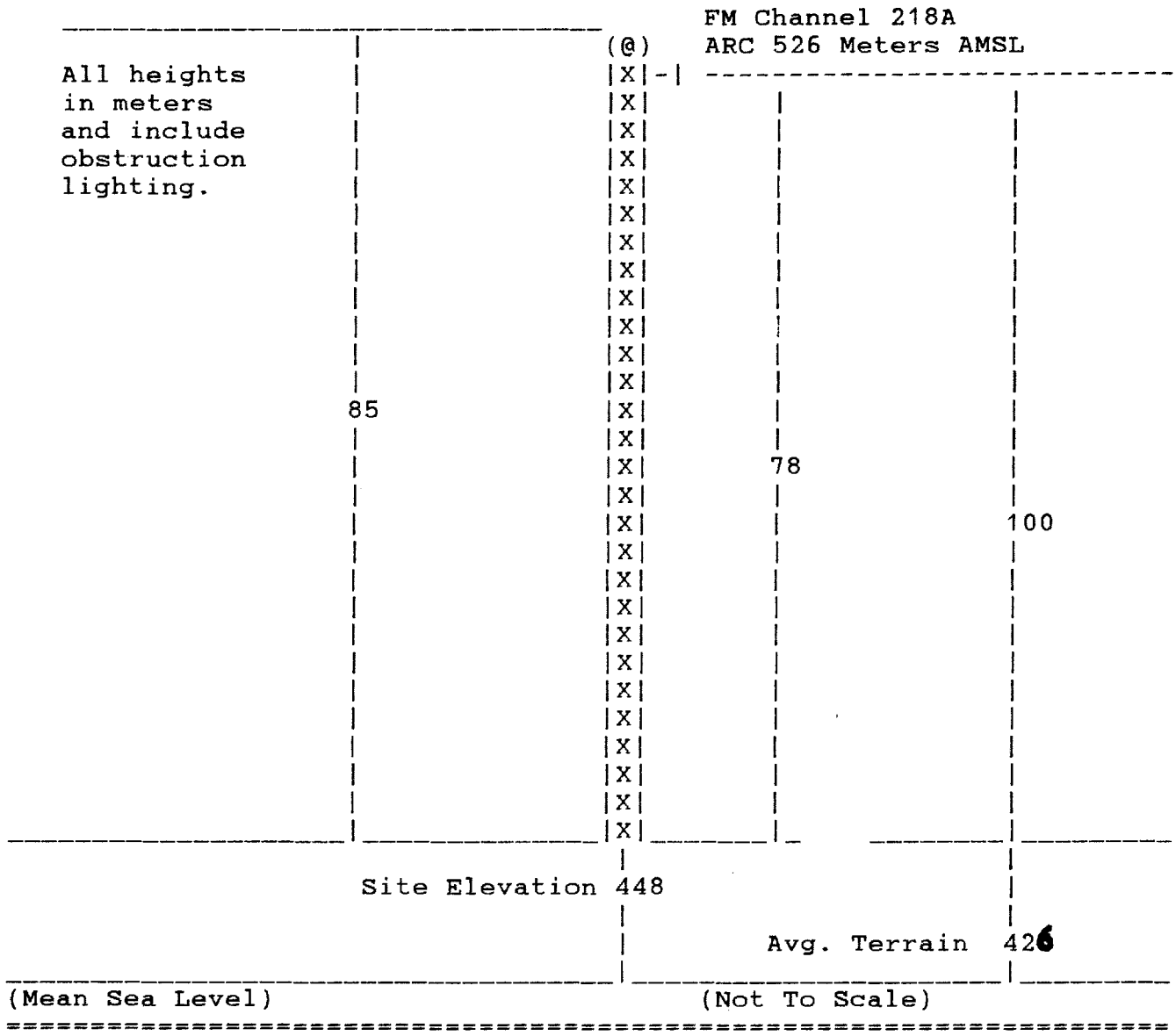
Name *(Typed or Printed)*	Relationship to Applicant *(e.g., Consulting Engineer)*
James E. Price	Technical Consultant
Signature	Address *(Include ZIP Code)*
	Sterling Communications, Inc. P.O. Box 80484 Chattanooga, TN 37411-7484
Date	Telephone No. *(Include Area Code)*
April 30, 1991	(615) 899-9393

Exhibit E-1
Arrowhead Ministries, Inc.
Binghamton, New York,
Vertical Plan Sketch

North Latitude 42-00-05
West Longitude 75-53-43

Overall Structure Height
533 Meters AMSL

All heights in meters and include obstruction lighting.



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

BINGHAMTON WEST QUADRANGLE
NEW YORK–BROOME CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)

Exhibit 2 - Figure 1
Arrowhead Christian Center
Binghamton, New York
Site Map - Reduced

Mapped, edited, and published by the Geological Survey

Control by USGS, USC&GS, and New York Department of Public Works

Topography by photogrammetric methods from aerial photographs taken 1967. Field checked 1968. Supersedes map dated 1961

Polyconic projection. 1927 North American datum
10,000-foot grid based on New York coordinate system, central zone
1000-meter Universal Transverse Mercator grid ticks, zone 18, shown in blue

Fine red dashed lines indicate selected fence and field lines where generally visible on aerial photographs. This information is unchecked

Red tint indicates areas in which only landmark buildings are shown

Map photoinspected 1976
No major culture or drainage changes observed

SCALE 1:24 000

CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

UTM GRID AND 1968 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY
DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

QUADRANGLE LOCATION

To place on the projected North American Datum 1983 move the projection lines 4 meters south and 29 meters west as shown by dashed corner ticks

ROAD CLASSIFICATION

Primary highway, hard surface — Light-duty road, hard or improved surface
Secondary highway, hard surface — Unimproved road
Interstate Route — U. S. Route — State Route

BINGHAMTON WEST, N. Y.
42076-A8-TF-024

1968
PHOTOINSPECTED 1976
DMA 5068 III SW—SERIES V931

Exhibit 2 - Figure 2
Arrowhead Christian Center
Binghamton, New York
Site Map - Full Scale

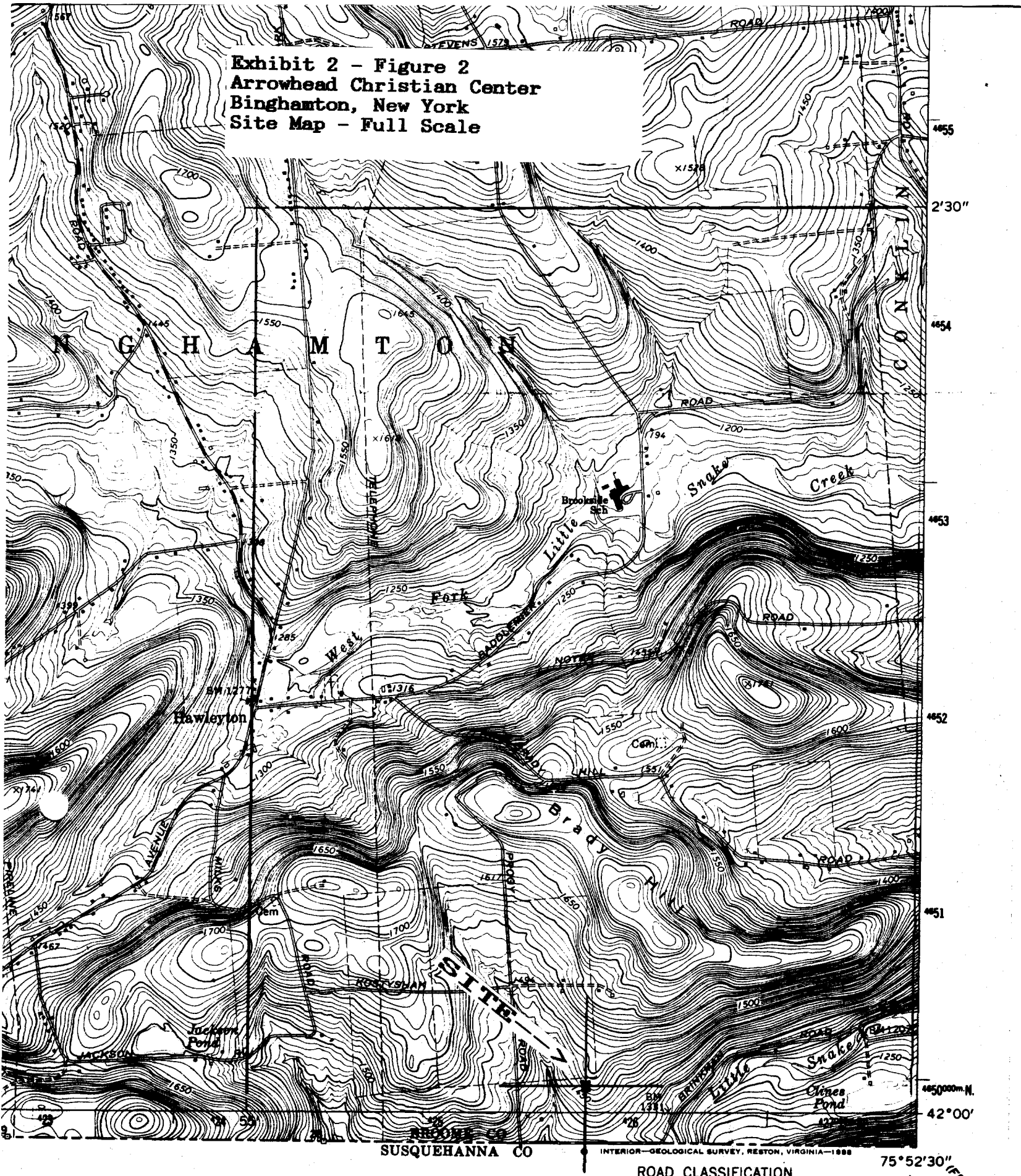


Exhibit 3
Arrowhead Christian Center
Binghamton, New York
60 dBu Service Contour
60 dBu
New York Sectional
Aeronautical Chart
Scale 1:500,000
SCALE 1: 500000
NM. 0 5 10 15 20 25 30 35 40 45 50 55 60
MILES 0 5 10 15 20 25 30 35 40

Exhibit 4 - Figure 1
Arrowhead Christian Center
Binghamton, New York
Tabulation Of Contour Calculations

NEW BINGHAMTON NY ¦ ED-24 1813T 1813C ¦ 042991 ¦
TABULATION OF TV/FM CONTOUR CALCULATIONS ON CHANNEL 218

AZIMUTH	ERP, KW.	HAAT (M)	60/50%	40/10%	54/10%	80/10%	100/10%	79.5/10%
0	1.5	175.26	27.486	77.78	40.446	8.6575	2.2207	8.9929
45	1.5	174.04	27.396	77.611	40.304	8.6092	2.2151	8.9446
90	1.5	132.59	24.311	71.508	35.269	7.3908	2.0434	7.5945
135	1.5	74.677	17.524	60.117	26.686	5.4787	1.6576	5.6361
180	1.5	40.539	13.237	47.218	19.03	4.0288	.98593	4.1442
225	1.5	38.1	12.916	46.101	18.314	3.9134	.93294	4.0288
270	1.5	50.597	14.565	52.426	21.919	4.5075	1.2384	4.6235
315	1.5	115.22	22.661	68.494	32.419	6.8738	1.9475	7.0761
352	1.5	118.47	23.073	69.147	33.148	7.006	1.975	7.2078
	AREAS, Sq. Km. :		1363.3	12800	2923.8	130.7	9.3977	139.48

OVERALL HEIGHT ABOVE AVERAGE TERRAIN = 100 (M)

ALL HEIGHTS IN METERS. ALL CONTOUR DISTANCES IN KILOMETERS.

ALL CONTOURS IN DBU AS DETERMINED BY BIVARIATE INTERPOLATION
USING VALUES FROM APPROPRIATE FCC F(50,50) AND F(50,10) CURVES.

FM BLANKETING CONTOUR 115 dBu = .30 MILES, .48 KM.
CALCULATED PURSUANT TO R&R 73.318(a) FOR MAXIMUM ERP.

Exhibit 4 - Figure 2
Arrowhead Christian Center
Binghamton, New York
Terrain Averaging Program

TERRAIN AVERAGING PROGRAM
BASED ON NGDC 30 SECOND DATABASE

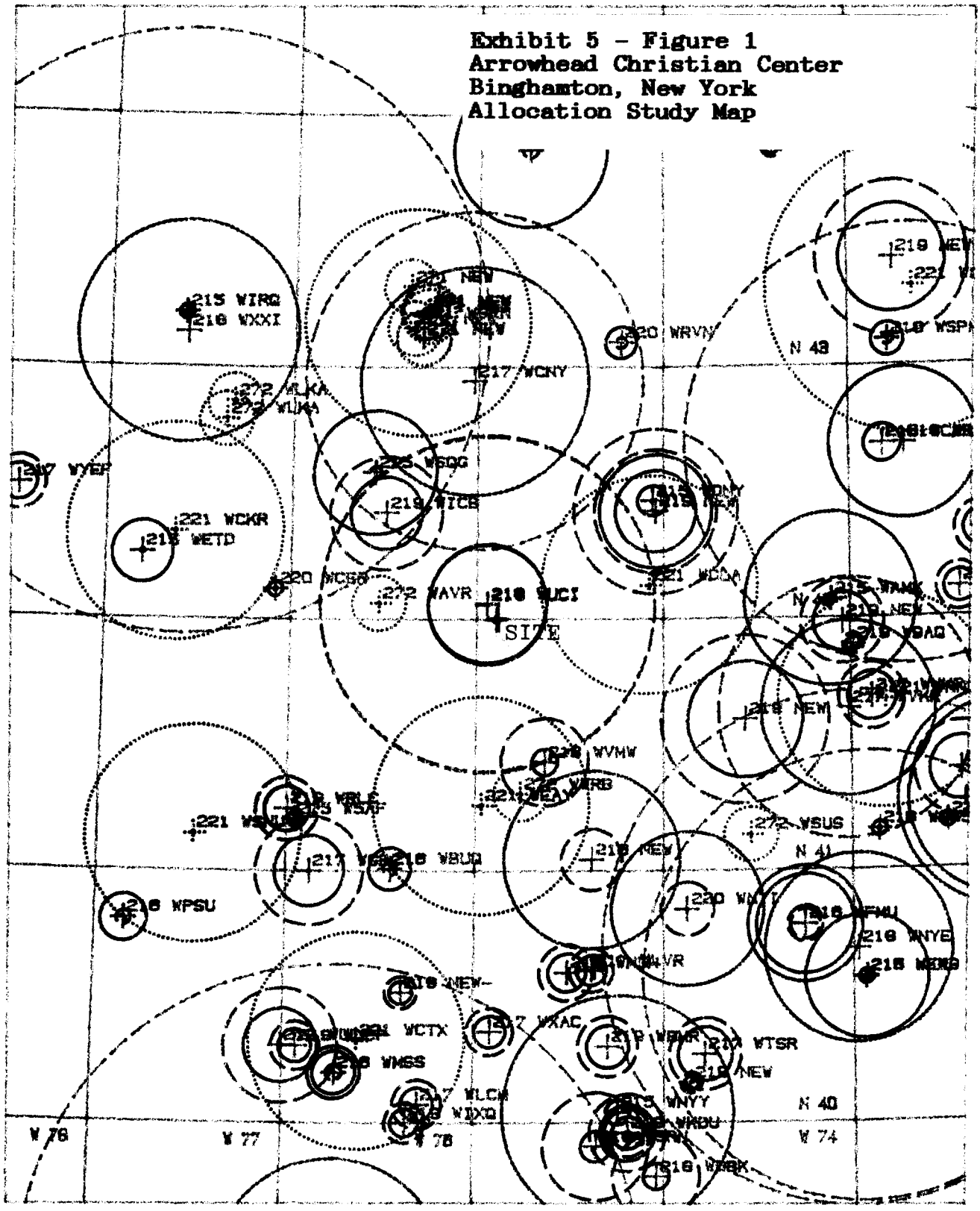
1813-196 ¦ BINGHAMTON NY ¦ 042991 ¦

N LAT: 420005
W LNG: 755343

BEARING DEG.	2-10 MI. ELEVATION METERS	FEET
0	351	1150
45	352	1154
90	393	1290
135	451	1480
180	485	1592
225	488	1600
270	475	1559
315	411	1347
352	367	1205
AVERAGE:	426	1397

BINGHAMTON NY | 042991 | CHANNEL 218 REF. N420005 W755343

Exhibit 5 - Figure 1
Arrowhead Christian Center
Binghamton, New York
Allocation Study Map



SCALE OF MILES 2500000

0 20 40 60 80 100 120 140 160 180 200

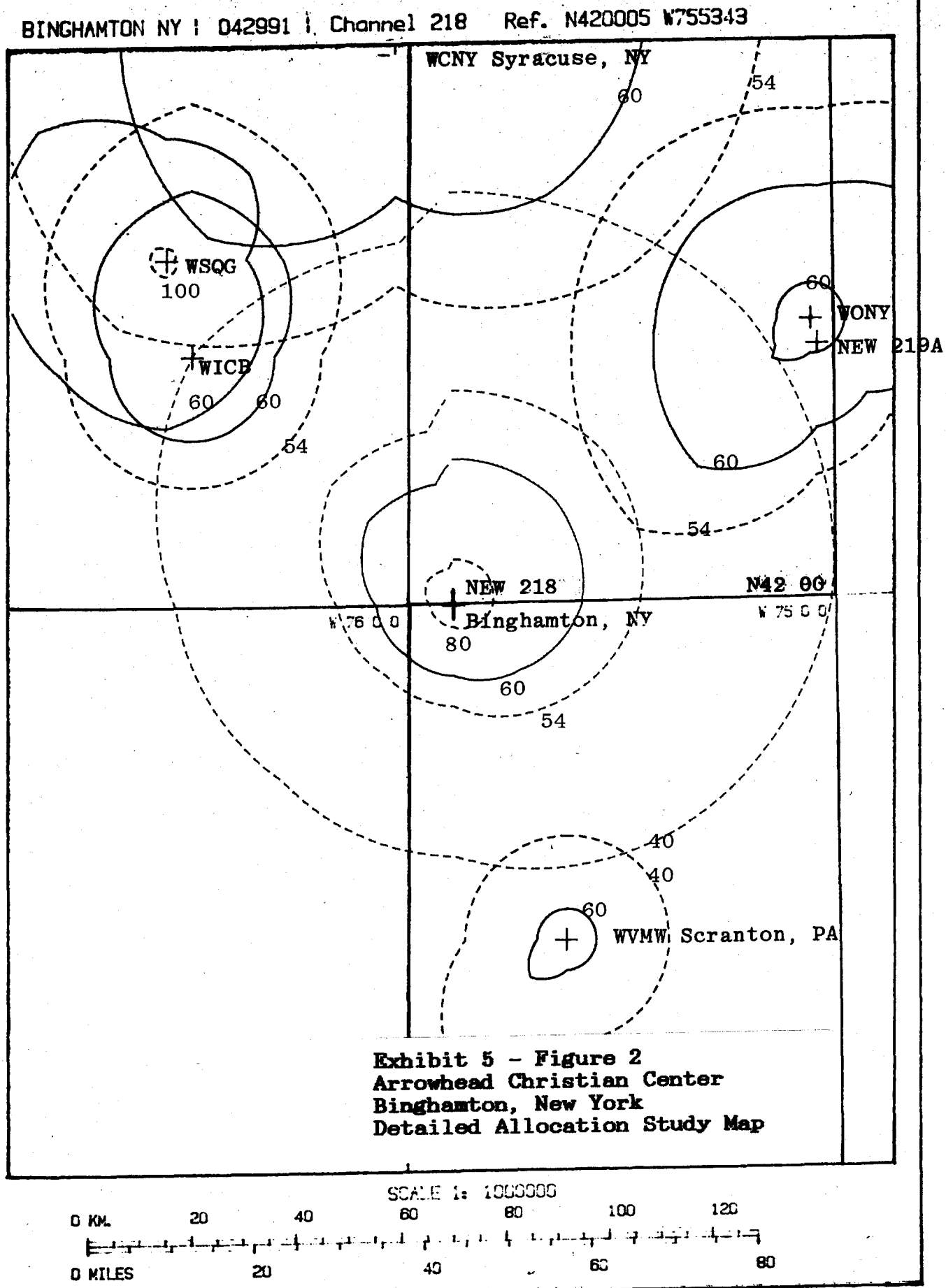


Exhibit 5 - Figure 2
Arrowhead Christian Center
Binghamton, New York
Detailed Allocation Study Map

IDENTIFICATION OF FACILITIES AND CONTOURS ON ALLOCATION MAP

BINGHAMTON NY ¦ 042991 ¦

REFERENCE POINT: N LAT 42-00-05 W LNG 75-53-43

EDUCATIONAL FM ALLOCATION STUDY FOR CHANNEL 218
(FREQUENCY 91.5 MHZ.)

CHAN	CALL	CITY AND STATE	CL/TYP	MILES	KM.	AZIMUTH	ERP	HAAT(M)	RELEVANT CONTOURS AND DISTANCES	
215D	WKRB	Brooklyn NY	D LI	141.72	228.07	133.39	.01	0	PC1mv/m=1.9759mi.	INTF100mv/m=-1.2762mi.
215A	WCDB	Albany NY	A LI	116.25	187.08	65.177	.1	64	PC1mv/m=5.1246mi.	INTF100mv/m=.0087668mi.
215B1	WAMK	Kingston NY	B1LI	92.119	148.25	86.312	.94	460	PC1mv/m=23.773mi.	INTF100mv/m=1.3071mi.
215A	WONY	Oneonta NY	A LI	53.521	86.133	52.695	.18	-22	PC1mv/m=4.0936mi.	INTF100mv/m=-.25564mi.
215C2	WJNY	Watertown NY	C2LI	128.73	207.17	3.6783	7.1	137	PC1mv/m=21.039mi.	INTF100mv/m=2.0176mi.
215D	W5AB	Watkins Glen NY	D LI	52.13	83.895	294.44	0	0		
215B1	WSQG	Ithaca NY	B1LI	52.464	84.432	320.13	5	99	PC1mv/m=16.987mi.	INTF100mv/m=1.6273mi.
215A	WETD	Alfred NY	A LI	99.35	159.88	281.04	.36	87	PC1mv/m=8.3858mi.	INTF100mv/m=.51719mi.
215D	WIRQ	Rochester NY	D LI	120.64	194.15	314.72	.01	0	PC1mv/m=1.9759mi.	INTF100mv/m=-1.2762mi.
215B	WHYY	Philadelphia PA	B LI	139.5	224.50	165.62	13.5	280	PC1mv/m=32.002mi.	INTF100mv/m=3.3446mi.
215D	W5AF	Muncy, etc. PA	D LI	77.672	125.00	225.24	.01	0	PC1mv/m=1.9759mi.	INTF100mv/m=-1.2762mi.
216B	WSHU	Fairfield CT	B LI	148.86	239.56	108.72	12.5	181	PC1mv/m=27.056mi.	INTF10mv/m=9.3575mi.
216B	WSHU	Fairfield CT	B AP	148.86	239.56	108.72	20	189	PC1mv/m=29.929mi.	INTF10mv/m=11.097mi.
216A	WFMU	East Orange NJ	A AP	119.44	192.22	134.05	1.45	151	PC1mv/m=15.842mi.	INTF10mv/m=4.8265mi.
216A	WFMU	East Orange NJ	A LI	119.51	192.33	134.06	1.45	110	PC1mv/m=13.552mi.	INTF10mv/m=4.1013mi.
216D	WOSS	Ossining NY	D LI	120.37	193.71	118.26	.01	21	PC1mv/m=1.9759mi.	INTF10mv/m=.34983mi.
216A	WSPN	Saratoga SpriNY	A LI	131.62	211.82	54.061	.25	30	PC1mv/m=4.4691mi.	INTF10mv/m=1.4864mi.
216D	W6AB	Elmira NY	D LI	46.99	75.623	280.94	0	0		
216D	W6AB	Stroudsburg, PA	D CP	78.787	126.79	151.44	0	0		
216B1	WEW	Jackson TownsPA	B1AP	71.259	114.68	157.84	3.5	264	PC1mv/m=24.305mi.	INTF10mv/m=8.3623mi.
216A	WMSS	Middletown PA	A LI	131.78	212.07	199.4	.65	-27	PC1mv/m=5.8884mi.	INTF10mv/m=1.8238mi.
216A	WMSS	Middletown PA	A AP	131.78	212.07	199.4	1.35	-21	PC1mv/m=7.211mi.	INTF10mv/m=2.1438mi.
216A	WBUQ	Bloomsburg PA	A LI	74.297	119.56	202.79	.6	-22	PC1mv/m=5.7435mi.	INTF10mv/m=1.7955mi.
216A	WPSU	State CollegePA	A LI	130.36	209.79	231.4	.87	-24	PC1mv/m=6.4159mi.	INTF10mv/m=1.9267mi.
217A	WCWL	Stockbridge MA	A LI	135.89	218.69	79.072	.45	12	PC1mv/m=5.223mi.	INTF.5mv/m=7.7316mi.
217A	WTSR	Trenton NJ	A LI	132.76	213.65	153.78	1.5	11	PC1mv/m=7.4016mi.	INTF.5mv/m=9.9102mi.
217A	WVKR	Poughkeepsie NY	A LI	105.47	169.73	101.25	1	-26	PC1mv/m=6.6679mi.	INTF.5mv/m=9.1765mi.
217B1	WVKR	Poughkeepsie NY	B1AP	99.915	160.79	103.87	3.7	250	PC1mv/m=24.051mi.	INTF.5mv/m=35.731mi.
217B	WCNY	Syracuse NY	B LI	65.464	105.35	354.28	18.5	226	PC1mv/m=31.321mi.	INTF.5mv/m=46.312mi.
217A	WYEF	Yorkshire NY	A CP	136.96	220.41	286.15	.38	-47	PC1mv/m=4.9476mi.	INTF.5mv/m=7.4256mi.
217A	WLVR	Bethlehem PA	A LI	99.973	160.89	164.28	.18	18	PC1mv/m=4.0936mi.	INTF.5mv/m=6.0735mi.
217A	WXAC	Reading PA	A LI	113.21	182.19	180.51	.22	-7	PC1mv/m=4.323mi.	INTF.5mv/m=6.4366mi.
217A	WLCH	Lancaster PA	A CP	134.83	216.98	188.87	.16	41	PC1mv/m=4.5031mi.	INTF.5mv/m=6.7219mi.
217B1	WGRC	Lewisburg PA	B1CP	85.767	138.02	216.5	5	27	PC1mv/m=9.5803mi.	INTF.5mv/m=14.827mi.
218C1		Ottawa ON	C1	241.76	389.07	.44381	0	0		
218C1		Ottawa ON	C1AS	241.76	389.07	.44381	0	0		
218C1		Ottawa ON	C1	241.76	389.07	.44381	0	0		
218B		Ottawa ON	B	241.76	389.07	.44381	0	0		
218A	NEW	Guilford CT	A AP	174.61	281.00	105.34	2	25	PC1mv/m=7.9222mi.	INTF.1mv/m=28.825mi.

Exhibit 5 - Figure 3
Arrowhead Christian Center
Binghamton, New York
Identification Of Facilities

CHAN	CALL	CITY AND STATE	CL/TYP	MILES	KM.	AZIMUTH	ERP	HAAT(M)	RELEVANT CONTOURS AND DISTANCES	
218D	W8AA	Hamden, etc. CT	D LI	158.58	255.20	103.83	.01	0	PC1mv/m=1.9759mi.	INTF.1mv/m=6.6679mi.
218A	NEW	North BranforCT	A AP	165.51	266.36	104.32	.1	49	PC1mv/m=4.3804mi.	INTF.1mv/m=15.345mi.
218D	W8AC	Naugatuck, etCT	D LI	149.45	240.51	102.36	0	0		
218A	WNMH	Northfield MA	A LI	183.41	295.16	73.222	.23	-94	PC1mv/m=4.3738mi.	INTF.1mv/m=15.389mi.
218A	WMHC	South Hadley MA	A LI	171.34	275.74	83.042	.1	-6	PC1mv/m=3.5516mi.	INTF.1mv/m=12.04mi.
218B	WBJC	Baltimore MD	B LI	185.7	298.85	193.89	50	152	PC1mv/m=32.389mi.	INTF.1mv/m=85.739mi.
218A	WDBK	Blackwood NJ	A LI	159.38	256.49	163.44	.1	25	PC1mv/m=3.5516mi.	INTF.1mv/m=12.04mi.
218B	WNYE	Brooklyn NY	B LI	134.74	216.84	131.7	20	131	PC1mv/m=25.94mi.	INTF.1mv/m=70.656mi.
218B1	NEW	Brooklyn NY	B1AP	141.72	228.07	133.39	20	50	PC1mv/m=17.062mi.	INTF.1mv/m=61.731mi.
218B1	WRPI	Troy NY	B1LI	121.68	195.82	66.294	10	113	PC1mv/m=20.732mi.	INTF.1mv/m=60.38mi.
218B1	WRPI	Troy NY	B1CP	121.68	195.82	66.294	10	113	PC1mv/m=20.732mi.	INTF.1mv/m=60.38mi.
218D	W8AE	Long, etc. NY	D CP	154.82	249.15	28.399	0	0		
218B1	WUCI	Binghamton NY	B1LI	4.538	7.3032	326.45	.63	241	PC1mv/m=16.351mi.	INTF.1mv/m=46.082mi.
218B1	WUCI	Binghamton NY	B1AP	4.9093	7.9007	328.9	.97	192	PC1mv/m=16.226mi.	INTF.1mv/m=46.071mi.
218B	WXII	Rochester NY	B LI	116.41	187.34	312.92	45	134	PC1mv/m=30.352mi.	INTF.1mv/m=82.739mi.
218A	WSRN	Swarthmore PA	A LI	147.4	237.21	168.81	.11	43	PC1mv/m=4.1785mi.	INTF.1mv/m=14.672mi.
218A	WVMW	Scranton PA	A LI	41.504	66.794	161.06	.1	-87	PC1mv/m=3.5516mi.	INTF.1mv/m=12.04mi.
219A	WXCI	Danbury CT	A LI	134.52	216.48	107.35	.76	62	PC1mv/m=8.7127mi.	INTF.5mv/m=12.921mi.
219A	WBSL	Sheffield MA	A LI	127.73	205.56	85.612	.23	-23	PC1mv/m=4.3738mi.	INTF.5mv/m=6.517mi.
219D	W9AQ	Hurley, etc. NY	D LI	98.325	158.23	93.64	.01	0	PC1mv/m=1.9759mi.	INTF.5mv/m=2.8177mi.
219A	NEW	Queensbury NY	A AP	146.57	235.88	47.173	.25	302	PC1mv/m=14.748mi.	INTF.5mv/m=21.128mi.
219B1	NEW	Middletown NY	B1AP	73.766	118.71	111.63	.75	208	PC1mv/m=15.863mi.	INTF.5mv/m=23.102mi.
219A	NEW	Kingston NY	A AP	95.075	153.00	90.09	.33	83	PC1mv/m=8.0643mi.	INTF.5mv/m=11.53mi.
219D	W9AC	Blue MountainNY	D LI	149.56	240.69	29.745	.01	0	PC1mv/m=1.9759mi.	INTF.5mv/m=2.8177mi.
219A	NEW	Oneonta NY	A AP	52.492	84.477	55.693	1.4	146	PC1mv/m=15.489mi.	INTF.5mv/m=22.569mi.
219D	W9AG	Oneonta NY	D LI	52.628	84.696	53.837	0	0		
219A	NEW	Oneonta NY	A AP	52.492	84.477	55.693	.4	146	PC1mv/m=11.15mi.	INTF.5mv/m=16.857mi.
219A	WRVE	Watertown NY	A CP	136.01	218.88	359.74	.21	7	PC1mv/m=4.2698mi.	INTF.5mv/m=6.3524mi.
219B1	WICB	Ithaca NY	B1LI	42.114	67.775	313.45	5.5	32	PC1mv/m=9.8762mi.	INTF.5mv/m=15.479mi.
219A	NEW	Bristol PA	A AP	138.21	222.42	156.64	.01	30	PC1mv/m=1.9759mi.	INTF.5mv/m=2.8177mi.
219A	WKDU	Philadelphia PA	A LI	145.6	234.32	165.16	.11	47	PC1mv/m=4.3857mi.	INTF.5mv/m=6.536mi.
219A	WKDU	Philadelphia PA	A AP	145.6	234.32	165.16	.8	47	PC1mv/m=7.6178mi.	INTF.5mv/m=10.55mi.
219A	WMUH	Allentown PA	A LI	98.909	159.17	168.24	.44	-1	PC1mv/m=5.1823mi.	INTF.5mv/m=7.6909mi.
219A	WBMR	Telford PA	A LI	121.24	195.11	164.87	.11	76	PC1mv/m=5.7892mi.	INTF.5mv/m=8.2978mi.
219A	WIXQ	Millersville PA	A LI	140.32	225.82	190	.13	21	PC1mv/m=3.7842mi.	INTF.5mv/m=5.4846mi.
219D	W9AX	Mifflinville,PA	D CP	78.305	126.01	200.65	0	0		
219A	WUCP	Summerdale PA	A CP	128.97	207.55	205.03	.25	-10	PC1mv/m=4.4691mi.	INTF.5mv/m=6.6679mi.
219D	NEW-	Tower City, ePA	D AP	105.56	169.88	194.03	.06	0	PC1mv/m=3.0989mi.	INTF.5mv/m=4.4224mi.
219A	WRLC	Williamsport PA	A AP	77.338	124.46	227.81	.74	-91	PC1mv/m=6.123mi.	INTF.5mv/m=8.6316mi.
219A	WUCP	Summerdale PA	A AP	130.61	210.19	206.65	.14	210	PC1mv/m=10.103mi.	INTF.5mv/m=15.734mi.
219A	WRLC	Williamsport PA	A LI	77.377	124.52	227.95	.77	-98	PC1mv/m=6.195mi.	INTF.5mv/m=8.7035mi.
220D	WOAB	Fairfield, etCT	D LI	139.42	224.37	113.38	0	0		
220D	WSLX	New Canaan CT	D LI	136.26	219.28	113.48	.01	0	PC1mv/m=1.9759mi.	INTF10mv/m=.34983mi.
220A	WCFM	Williamstown MA	A LI	146.23	235.33	69.386	.44	-229	PC1mv/m=5.1823mi.	INTF10mv/m=1.886mi.
220D	WOAA	Parlin, etc. NJ	D CP	135.4	217.90	141.62	0	0		
220B1	WNTI	Hackettstown NJ	B1LI	95.357	153.46	146.05	5.6	155	PC1mv/m=21.05mi.	INTF10mv/m=7.2647mi.
220D	WOAG	LawrencevilleNJ	D LI	134.23	216.02	151.73	0	0		
220D	WOAA	Parlin, etc. NJ	D LI	132.63	213.44	140.55	0	0		
220D	WOAE	Kingston, etcNY	D CP	103.66	166.82	92.425	0	0		
220D	WOAF	Utica NY	D LI	83.329	134.10	23.804	0	0		
220A	WRVN	Utica NY	A LI	83.067	133.68	23.727	.21	-25	PC1mv/m=4.2698mi.	INTF10mv/m=1.4248mi.
220D	WCEB	Corning NY	D LI	61.675	99.256	278.02	.01	0	PC1mv/m=1.9759mi.	INTF10mv/m=.34983mi.

Exhibit 5 – Figure 4
Arrowhead Christian Center
Binghamton, New York
Identification Of Facilities

CHAN	CALL	CITY AND STATE	CL/TYP	MILES	KM.	AZIMUTH	ERP	HAAT(M)	RELEVANT CONTOURS AND DISTANCES
220D	WOAH	Carlisle, etcPA	D LI	139.13	223.90	211.57	0	0	
221A	WRNQ	Poughkeepsie NY	A CP	109.4	176.06	101.17	2.15	117	REQUIRED SEPARATION 47.9km/29.795mi
221D	WGFR	Glens Falls NY	D LI	145.88	234.77	50.807	.01	19	REQUIRED SEPARATION 64.9km/40.358mi
221A	WDLA	Walton NY	A LI	42.946	69.114	77.178	.69	200	REQUIRED SEPARATION 47.9km/29.795mi
221D	W1AQ	Watertown NY	D LI	136.62	219.86	359.11	0	0	
221B1		BaldwinsvilleNY	B1AS	84.422	135.86	344.66	0	0	
221B1	WSEN	BaldwinsvilleNY	B1LI	84.399	135.82	344.66	25	91	REQUIRED SEPARATION 49.9km/31.037mi
221A	WCKR	Hornell NY	A LI	91.984	148.03	285.53	1.25	156	REQUIRED SEPARATION 47.9km/29.795mi
221D	W1AC	Mount Pocono PA	D LI	68.15	109.67	155.87	0	0	
221A	WEAY	Nanticoke PA	A LI	51.169	82.348	184.22	.67	168	REQUIRED SEPARATION 47.9km/29.795mi
221A	WEAY	Nanticoke PA	A CP	51.169	82.348	184.22	.76	202	REQUIRED SEPARATION 47.9km/29.795mi
221D	W1AC	Mount Pocono PA	D CP	66.532	107.07	156.25	0	0	
221A	WCTX	Palmyra PA	A LI	121.43	195.42	198.03	3	91	REQUIRED SEPARATION 47.9km/29.795mi
221D	W1AS	Sayre PA	D LI	34.422	55.396	272.85	0	0	
221A	WSNU	Lock Haven PA	A DE	101.43	163.23	234.88	0	0	
221A	WSNU	Lock Haven PA	A LI	101.43	163.23	234.88	3	70	REQUIRED SEPARATION 47.9km/29.795mi
221A	WSNU	Lock Haven PA	A AP	101.51	163.36	234.92	3	100	REQUIRED SEPARATION 47.9km/29.795mi
271A		Phoenix NY	A AS	86.584	139.34	346.73	0	0	
271A	NEW	Phoenix NY	A AP	79.821	128.45	345.02	3	100	REQUIRED SEPARATION 11.9km/7.4254mi
271A	NEW	Phoenix NY	A AP	79.559	128.03	344.87	3	100	REQUIRED SEPARATION 11.9km/7.4254mi
271A	NEW	Phoenix NY	A AP	94.297	151.75	345.24	3	100	REQUIRED SEPARATION 11.9km/7.4254mi
271A	NEW	Phoenix NY	A AP	86.592	139.35	347.09	3	100	REQUIRED SEPARATION 11.9km/7.4254mi
271A	NEW	Phoenix NY	A AP	86.68	139.49	347.4	3	100	REQUIRED SEPARATION 11.9km/7.4254mi
271A	NEW	Phoenix NY	A AP	85.315	137.30	347.03	3	100	REQUIRED SEPARATION 11.9km/7.4254mi
271A	NEW	Phoenix NY	A AP	83.024	133.61	343.9	3	100	REQUIRED SEPARATION 11.9km/7.4254mi
272A	WSUS	Franklin NJ	A LI	91.89	147.88	129.76	.59	227	REQUIRED SEPARATION 11.9km/7.4254mi
272A	WAVR	Waverly NY	A LI	32.656	52.554	277.76	1.5	122	REQUIRED SEPARATION 11.9km/7.4254mi
272A	WLKA	Canandaigua NY	A LI	94.154	151.52	309.76	3	87	REQUIRED SEPARATION 11.9km/7.4254mi
272A	WLKA	Canandaigua NY	A CP	92.827	149.39	306.51	.46	244	REQUIRED SEPARATION 11.9km/7.4254mi
272A	WWRB	Pittston PA	A LI	48.525	78.093	171.72	3	22	REQUIRED SEPARATION 11.9km/7.4254mi

Exhibit 5 - Figure 5
Arrowhead Christian Center
Binghamton, New York
Identification Of Facilities

Exhibit 5 - Figure 6
Arrowhead Christian Center
Binghamton, New York
WSQG N42-34-55 W76-33-22

WSQG ITHACA NY ; 042991 ;
TABULATION OF TV/FM CONTOUR CALCULATIONS ON CHANNEL 215

AZIMUTH	ERP, KW.	HAAT (M)	60/50%	100/10%
0	5	64.009	22.904	2.2973
45	5	62.18	22.672	2.2827
90	5	10.059	15.417	1.4334
135	5	75.591	24.372	2.3949
180	5	138.99	31.506	2.984
225	5	117.35	29.663	2.8252
270	5	142.95	31.797	3.0092
315	5	169.78	34.574	3.1945
140	5	82.635	25.263	2.4583

AREAS, Sq. Km. : 2336.2 21.373

OVERALL HEIGHT ABOVE AVERAGE TERRAIN = 97.614 (M)

ALL HEIGHTS IN METERS. ALL CONTOUR DISTANCES IN KILOMETERS.

ALL CONTOURS IN DBU AS DETERMINED BY BIVARIATE INTERPOLATION
USING VALUES FROM APPROPRIATE FCC F(50,50) AND F(50,10) CURVES.

FM BLANKETING CONTOUR 115 dBu = .55 MILES, .88 KM.
CALCULATED PURSUANT TO R&R 73.318(a) FOR MAXIMUM ERP.

Exhibit 5 - Figure 7
Arrowhead Christian Center
Binghamton, New York
WSQG N42-34-55 W76-33-22

TERRAIN AVERAGING PROGRAM
BASED ON NGDC 30 SECOND DATABASE

1813-196 ¦ WSQG ITHACA NY ¦ 042991 ¦

N LAT: 423455
W LNG: 763322

BEARING DEG.	2-10 MI. ELEVATION METERS	FEET
0	315	1033
45	317	1039
90	369	1210
135	303	995
180	240	787
225	261	858
270	236	774
315	209	686
140	300	984
AVERAGE:	281	923

Exhibit 5 - Figure 8
Arrowhead Christian Center
Binghamton, New York
WONY N42-28-02 W75-03-40

WONY ONEONTA NY ; 042991 ;
TABULATION OF TV/FM CONTOUR CALCULATIONS ON CHANNEL 215

AZIMUTH	ERP, KW.	HAAT (M)	60/50%	100/10%
0	.18	13.716	6.5875	.27198
45	.18	15.24	6.5875	.27198
90	.18	-10.973	6.5875	.27198
135	.18	-131.37	6.5875	.27198
180	.18	-111.86	6.5875	.27198
225	.18	70.105	10.362	.56747
270	.18	-34.138	6.5875	.27198
315	.18	5.7913	6.5875	.27198
233	.18	51.573	8.5192	.43858

AREAS, Sq. Km. : 161.46 .3298

OVERALL HEIGHT ABOVE AVERAGE TERRAIN = -22.938 (M)

ALL HEIGHTS IN METERS. ALL CONTOUR DISTANCES IN KILOMETERS.

ALL CONTOURS IN DBU AS DETERMINED BY BIVARIATE INTERPOLATION
USING VALUES FROM APPROPRIATE FCC F(50,50) AND F(50,10) CURVES.

FM BLANKETING CONTOUR 115 dBu = .10 MILES, .17 KM.
CALCULATED PURSUANT TO R&R 73.318(a) FOR MAXIMUM ERP.

Exhibit 5 - Figure 9
Arrowhead Christian Center
Binghamton, New York
WONY N42-28-02 W75-03-40

TERRAIN AVERAGING PROGRAM
BASED ON NGDC 30 SECOND DATABASE

1813-196 ¦ WONY ONEONTA NY ¦ 042991 ¦

N LAT: 422802
W LNG: 750340

BEARING DEG.	2-10 MI. ELEVATION METERS	FEET
0	435	1428
45	434	1423
90	460	1509
135	580	1904
180	561	1840
225	379	1243
270	483	1585
315	443	1454
233	369	1211
AVERAGE:	472	1548

Exhibit 5 - Figure 10
Arrowhead Christian Center
Binghamton, New York
WCNY N42-56-42 W76-01-28

WCNY SYRACUSE NY ; 042991 ;
TABULATION OF TV/FM CONTOUR CALCULATIONS ON CHANNEL 217

AZIMUTH	ERP, KW.	HAAT (M)	60/50%	54/10%
0	18.5	347.78	59.047	86.652
45	18.5	252.38	52.476	77.318
90	18.5	183.8	47.13	69.557
135	18.5	128.02	40.768	61.374
180	18.5	56.389	28.659	45.289
225	18.5	227.08	50.495	74.593
270	18.5	248.11	52.172	76.914
315	18.5	347.78	59.047	86.652
174	18.5	65.938	30.463	48.229

AREAS, Sq. Km. : 7737.4 16938

OVERALL HEIGHT ABOVE AVERAGE TERRAIN = 223.91 (M)

ALL HEIGHTS IN METERS. ALL CONTOUR DISTANCES IN KILOMETERS.

ALL CONTOURS IN DBU AS DETERMINED BY BIVARIATE INTERPOLATION
USING VALUES FROM APPROPRIATE FCC F(50,50) AND F(50,10) CURVES.

FM BLANKETING CONTOUR 115 dBu = 1.05 MILES, 1.70 KM.
CALCULATED PURSUANT TO R&R 73.318(a) FOR MAXIMUM ERP.

Exhibit 5 - Figure 11
Arrowhead Christian Center
Binghamton, New York
WCNY N42-56-42 W76-01-28

TERRAIN AVERAGING PROGRAM
BASED ON NGDC 30 SECOND DATABASE

1813-196 WCNY SYRACUSE NY ¦ 042991 ¦

N LAT: 425642
W LNG: 760128

BEARING DEG.	2-10 MI. ELEVATION METERS	FEET
0	182	598
45	278	911
90	346	1136
135	402	1319
180	474	1554
225	303	994
270	282	925
315	185	608
174	453	1485
AVERAGE:	306	1006

Exhibit 5 - Figure 12
Arrowhead Christian Center
Binghamton, New York
WVMW N41-25-57 W75-38-06

WVMW SCRANTON PA ! 042991 !
TABULATION OF TV/FM CONTOUR CALCULATIONS ON CHANNEL 218

AZIMUTH	ERP, KW.	HAAT (M)	60/50%	40/10%
0	.1	-142.95	5.7154	19.375
45	.1	-20.422	5.7154	19.375
90	.1	-206.35	5.7154	19.375
135	.1	-154.84	5.7154	19.375
180	.1	-132.28	5.7154	19.375
225	.1	88.698	9.8773	31.804
270	.1	-97.232	5.7154	19.375
315	.1	-79.859	5.7154	19.375
341	.1	-82.257	5.7154	19.375

AREAS, Sq. Km. : 128.11 1429.1

OVERALL HEIGHT ABOVE AVERAGE TERRAIN = -93.154 (M)

ALL HEIGHTS IN METERS. ALL CONTOUR DISTANCES IN KILOMETERS.

ALL CONTOURS IN DBU AS DETERMINED BY BIVARIATE INTERPOLATION
USING VALUES FROM APPROPRIATE FCC F(50,50) AND F(50,10) CURVES.

FM BLANKETING CONTOUR 115 dBu = .08 MILES, .12 KM.
CALCULATED PURSUANT TO R&R 73.318(a) FOR MAXIMUM ERP.

Exhibit 5 - Figure 13
Arrowhead Christian Center
Binghamton, New York
WVMW N41-25-57 W75-38-06

TERRAIN AVERAGING PROGRAM
BASED ON NGDC 30 SECOND DATABASE

1813-196 ¦ WVMW SCRANTON PA ¦ 042591 ¦

N LAT: 412557
W LNG: 753806

BEARING DEG.	2-10 MI. ELEVATION METERS	FEET
0	451	1480
45	329	1078
90	515	1688
135	463	1519
180	440	1445
225	220	720
270	406	1330
315	388	1273
341	417	1369
AVERAGE:	401	1317

Exhibit 5 - Figure 14
Arrowhead Christian Center
Binghamton, New York
NEW Oneonta, NY N42-25-33 W75-02-47

NEW 219A ONEONTA NY ¦ BPED-891204MA ¦ 042991 ¦
TABULATION OF TV/FM CONTOUR CALCULATIONS ON CHANNEL 219

AZIMUTH	ERP, KW.	HAAT (M)	60/50%	54/10%
0	2.6	157.28	29.213	43.557
45	2.6	227.08	34.142	51.147
90	2.6	113.08	25.466	37.462
135	2.6	28.652	13.513	19.597
180	2.6	48.159	15.845	24.676
225	2.6	204.83	32.351	46.601
270	2.6	187.15	31.332	46.859
315	2.6	195.99	31.814	47.698
236	2.6	200.51	32.06	48.129

AREAS, Sq. Km. : 2411.8 5396.5

OVERALL HEIGHT ABOVE AVERAGE TERRAIN = 145.28 (M)

ALL HEIGHTS IN METERS. ALL CONTOUR DISTANCES IN KILOMETERS.

ALL CONTOURS IN DBU AS DETERMINED BY BIVARIATE INTERPOLATION
USING VALUES FROM APPROPRIATE FCC F(50,50) AND F(50,10) CURVES.

FM BLANKETING CONTOUR 115 dBu = .40 MILES, .64 KM.
CALCULATED PURSUANT TO R&R 73.318(a) FOR MAXIMUM ERP.

Exhibit 5 - Figure 15
Arrowhead Christian Center
Binghamton, New York
NEW Oneonta, NY N42-25-33 W75-02-47

TERRAIN AVERAGING PROGRAM
BASED ON NGDC 30 SECOND DATABASE

1813-196 ¦ NEW 219A ONEONTA NY (N219T) ¦ 042991 ¦

N LAT: 422533
W LNG: 750247

BEARING DEG.	2-10 MI. ELEVATION METERS	FEET
0	468	1535
45	398	1306
90	512	1680
135	596	1957
180	577	1893
225	420	1379
270	438	1437
315	429	1408
236	516	1694
AVERAGE:	480	1574