FEDERAL COMMUNICATIONS COMMISSION

CLASS OF STATION FM MEH

The following application is submitted for action by the Chief, Broadcast Bureau.

ST	FILE NUMBER	CALL	APPLICANT AND LOCATION	NATURE OF APPLICATION
NY	BPED -910501MC N/M	NEW 91.5MHZ	ARROWHEAD MINISTRIES, INC. BINGHAMTON NY	CP FOR NEW FM EDUC. ON FREQ: 91.5 MHZ; ERP: 1.5 KW (H&V); HAAT: 100 METERS (H&V); 42 00 05 75 53 43 MUTUALLY EXCLUSIVE WITH WUCI-FM RENEWAL APPLICATION. PETITION FOR RECONSIDERATION FILED ON 8/26/91. PETITION FOR RECONSIDERATION HEREBY GRANTED 12/3/91.

LICENSE EXPIRATION DATE _____

_____
CHIEF, LICENSE DIVISION

RECOMMENDATION: GRANT( ) CONSTRUCTION DATES, START _____ END _____

CONTESTED ( ) UNCONTESTED ( )

APPROVED _____

_____
FOR CHIEF, BROADCAST BUREAU

F.C.C.-WASHINGTON, D.C.

Form A-378
January 1980

Federal Communications Commission
Washington, D. C. 20554

FCC 340

Approved by OMB
3060-0034
Expires 4/30/92
See Page 23 for information regarding public burden estimate

APPLICATION FOR CONSTRUCTION PERMIT FOR NONCOMMERCIAL EDUCATIONAL BROADCAST STATION

(Carefully read instructions before filing form) Return only form to FCC

For Commission Use Only
File No.

Section I - GENERAL INFORMATION

1. Name of Applicant		
Arrowhead Ministries, Inc.		
Street Address or P.O. Box		
308 Harry L. Drive		
City	State	ZIP Code
Johnson City	NY	13790
Telephone No. (Include Area Code)		
(607) 798-1793		

Send notices and communications to the following person at the address below:		
Name		
David A. Martin		
Street Address or P.O. Box		
308 Harry L. Drive		
City	State	ZIP Code
Johnson City	NY	13790
Telephone No. (Include Area Code)		
(607) 798-1793		

2. This application is for: ☐ AM ☒ FM ☐ TV

(a) Channel No. or Frequency	(b) Principal Community	City	State
218A, 91.5 mHz		Binghamton	NY

(c) Check one of the following boxes:

☐ Application for **NEW** station

☐ **MAJOR** change in licensed facilities; call sign: _____

☐ **MINOR** change in licensed facilities; call sign: _____

☐ **MAJOR** modification of construction permit; call sign: _____

File No. of construction permit: _____

☐ **MINOR** modification of construction permit; call sign: _____

File No. of construction permit: _____

☒ **AMENDMENT** to pending application; application file number: BPED-910501MC

NOTE: It is not necessary to use this form to amend a previously filed application. Should you do so, however, please submit only Section I and those other portions of the form that contain the amended information.

3. Is this application mutually exclusive with a renewal application? ☒ Yes ☐ No

If Yes, state:	Call letters	Community of License	
		City	State
	WUCI-FM	Binghamton	NY

Section V-B - FM BROADCAST ENGINEERING DATA	FOR COMMISSION USE ONLY File No. _____ ASB Referral Date _____ Referred by _____

Name of Applicant

Arrowhead Ministries, Inc.

Call letters *(if issued)*	Is this application being filed in response to a window? [X] Yes [ ] No
(NEW)	If Yes, specify closing date: May 1, 1991

Purpose of Application: *(check appropriate box(es))*

- [X] Construct a new (main) facility
- [ ] Construct a new auxiliary facility
- [ ] Modify existing construction permit for main facility
- [ ] Modify existing construction permit for auxiliary facility
- [ ] Modify licensed main facility
- [ ] Modify licensed auxiliary facility

purpose is to modify, indicate below the nature of change(s) and specify the file number(s) of the authorizations affected.

- [ ] Antenna supporting-structure height
- [ ] Effective radiated power
- [ ] Antenna height above average terrain
- [ ] Frequency
- [ ] Antenna location
- [ ] Class
- [ ] Main Studio location
- [ ] Other *(Summarize briefly)*

File Number(s) BPED-910501MC

1. Allocation:

Channel No.	Principal community to be served: City	County	State
218	Binghamton	Broome	NY

Class *(check only one box below)*

[X] A [ ] B1 [ ] B [ ] C3 [ ] C2 [ ] C1 [ ] C [ ] D

2. Exact location of antenna.
   (a) Specify address, city, county and state. If no address, specify distance and bearing relative to the nearest town or landmark.
   SE of intersection of Progy & Kostyshak Roads, 11.14 kM at 172 degrees True from Binghamton (Broome County), New York.
   (b) Geographical coordinates (to nearest second). If mounted on element of an AM array, specify coordinates of center of array. Otherwise, specify tower location. Specify South Latitude or East Longitude where applicable; otherwise, North Latitude or West Longitude will be presumed.

Latitude	42°	00'	05"	Longitude	75°	53'	43"

3. Is the supporting structure the same as that of another station(s) or proposed in another pending application(s)? [ ] Yes [X] No

   If Yes, give call letter(s) or file number(s) or both. _____

   If proposal involves a change in height of an existing structure, specify existing height above ground level including antenna, all other appurtenances, and lighting, if any.

4. Does the application propose to correct previous site coordinates? ☐ Yes ☒ No
If Yes, list old coordinates.

Latitude ° ' "	Longitude ° ' "

5. Has the FAA been notified of the proposed construction? ☒ Yes ☐ No
If Yes, give date and office where notice was filed and attach as an Exhibit a copy of FAA determination, if available.

Exhibit No. FAA-01

Date April 29, 1991 Office where filed AEA-530 Jamaica, NY

6. List all landing areas within 8 km of antenna site. Specify distance and bearing from structure to nearest point of the nearest runway.

	Landing Area	Distance (km)	Bearing (degrees True)
(a)	Luke (Pvt.)	4	290
(b)			

7. (a) Elevation: *(to the nearest meter)*

(1) of site above mean sea level; 448 meters

(2) of the top of supporting structure above ground (including antenna, all other appurtenances, and lighting, if any); and 85 meters

(3) of the top of supporting structure above mean sea level [(a)(1) + (a)(2)] 533 meters

(b) Height of radiation center: *(to the nearest meter)* H = Horizontal; V = Vertical

(1) above ground 78 meters (H)
78 meters (V)

(2) above mean sea level [(a)(1) + (b)(1)] 526 meters (H)
526 meters (V)

(3) above average terrain 100 meters (H)
100 meters (V)

8. Attach as an Exhibit sketch(es) of the supporting structure, labelling all elevations required in Question 7 above, except item 7(b)(3). If mounted on an AM directional-array element, specify heights and orientations of all array towers, as well as location of FM radiator.

Exhibit No. E-1

9. Effective Radiated Power:
(a) ERP in the horizontal plane 1.2 kw (H*) 1.2 kw (V*)

(b) Is beam tilt proposed? ☐ Yes ☒ No

If Yes, specify maximum ERP in the plane of the tilted beam, and attach as an Exhibit a vertical elevational plot of radiated field.

Exhibit No.

_____ kw (H*) _____ kw (V*)

*Polarization

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 1,331 sq. km. Population 215,888

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. E-3

Enter the following from Exhibit above: Gain Area 12.1 sq. mi.
Loss Area 46.5 sq. mi.

Percent change (gain area plus loss area as percentage of present area) 10.5 %.
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.

SECTION V-B – FM BROADCAST ENGINEERING DATA (Page 6)

(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. ANSI-01

If No, explain briefly why not.
The proposed construction does not require any action covered by Section 1.1307 of the Rules. See Exhibit ANSI-01 for statement regarding compliance with ANSI standards.

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: James E. Price	Address *(Include ZIP Code)* Sterling Communications, Inc. P.O. Box 80484 Chattanooga, TN 37411-7484
Date: August 15, 1991	Telephone No. *(Include Area Code)* (615) 899-9393

MAY 10 REC'D

Exhibit FAA-01
Arrowhead Ministries, Inc.
Binghamton, New York
FAA Determination
No Hazard

DO NOT REMOVE CARBONS

Form Approved OMB No 2120-0001

U.S. Department of Transportation
Federal Aviation Administration

NOTI

Aeronautical Study Number: 91-AEA-0729-OE

1. Nature of Proposal

A. Type: [X] New Construction [ ] Alteration

B. Class: [X] Permanent [ ] Temporary (Duration _____ months)

C. Work Schedule Dates: Beginning 3 mo FCC CP; End 6 mo FCC CP

2. Complete Description of Structure

A. Include effective radiated power and assigned frequency of all existing, proposed or modified AM, FM, or TV broadcast stations utilizing this structure.

B. Include size and configuration of power transmission lines and their supporting towers in the vicinity of FAA facilities and public airports.

C. Include information showing site orientation, dimensions, and construction materials of the proposed structure.

A. 91.5 mHz w/ 1.5 kW ERP

B. N/A

C. see exhibits attached

(if more space is required, continue on a separate sheet.)

3A. Name and address of individual, company, corporation, etc. proposing the construction or alteration. (Number, Street, City, State and Zip Code)

(607) 798-1793
area code — Telephone Number

Mr. David Martin
Arrowhead Christian Center
308 Harry L Drive
Johnson City, NY 13970

B. Name, address and telephone number of proponent's representative if different than 3 above.

Sterling Communications, Inc.
P.O. Box 80484
Chattanooga, TN 37411-7484

4. Location of Structure

A. Coordinates (To nearest second): Latitude 42° 00' 05"; Longitude 75° 53' 43"

B. Nearest City or Town and State: Binghamton, NY

(1) Distance to 4B: 6.92 Miles

(2) Direction to 4B: NNW

C. Name of nearest airport, heliport, flightpark, or seaplane base: Luke (Pvt)

(1) Distance from structure to nearest point of nearest runway: 2.5

(2) Direction from structure to airport: NW

5. Height and Elevation (Complete to the nearest foot)

A. Elevation of site above mean sea level: 1470

B. Height of Structure including all appurtenances and lighting (if any) above ground, or water if so situated: 280

C. Overall height above mean sea level (A + B): 1750

D. Description of location of site with respect to highways, streets, airports, prominent terrain features, existing structures, etc. Attach a U.S. Geological Survey quadrangle map or equivalent showing the relationship of construction site to nearest airport(s). (if more space is required, continue on a separate sheet of paper and attach to this notice.)

See exhibits attached

Notice is required by Part 77 of the Federal Aviation Regulations (14 C.F.R. Part 77) pursuant to Section 1101 of the Federal Aviation Act of 1958, as amended (49 U.S.C. 1101). Persons who knowingly and willingly violate the Notice requirements of Part 77 are subject to a fine (criminal penalty) of not more than $500 for the first offense and not more than $2,000 for subsequent offenses, pursuant to Section 902(a) of the Federal Aviation Act of 1958, as amended (49 U.S.C. 1472(a)).

I HEREBY CERTIFY that all of the above statements made by me are true, complete, and correct to the best of my knowledge. In addition, I agree to obstruction mark and/or light the structure in accordance with established marking & lighting standards if necessary.

Date	Typed Name/Title of Person Filing Notice	Signature
4/29/91	James E. Price, Tech. Consultant	

FOR FAA USE ONLY — *FAA will either return this form or issue a separate acknowledgement.*

The Proposal:

[ ] Does not require a notice to FAA.

[X] Is not identified as an obstruction under any standard of FAR, Part 77, Subpart C, and would not be a hazard to air navigation.

[ ] Is identified as an obstruction under the standards of FAR, Part 77, Subpart C, but would not be a hazard to air navigation.

[X] Should be obstruction [X] marked, [X] lighted per FAA Advisory Circular 70/7460-1, Chapter (s) 3, 4, 5 and 9

[ ] Obstruction marking and lighting are not necessary.

Remarks:

Supplemental Notice of Construction FAA Form 7460-2 is required any time the project is abandoned, or

[X] At least 48 hours before the start of construction.

[X] Within five days after the construction reaches its greatest height.

This determination expires on 12/26/91 unless:

(a) extended, revised or terminated by the issuing office;

(b) the construction is subject to the licensing authority of the Federal Communications Commission and an application for a construction permit is made to the FCC on or before the above expiration date. In such case the determination expires on the date prescribed by the FCC for completion of construction, or on the date the FCC denies the application.

NOTE: Request for extension of the effective period of this determination must be postmarked or delivered to the issuing office at least 15 days prior to the expiration date.

If the structure is subject to the licensing authority of the FCC, a copy of this determination will be sent to that Agency.

FCC

Issued in	Signature	Date
ASO-530 JAMAICA NY	Francis J. Jordan Jr.	06/26/91

FAA Form 7460-1 (8-85)

DO NOT REMOVE CARBONS

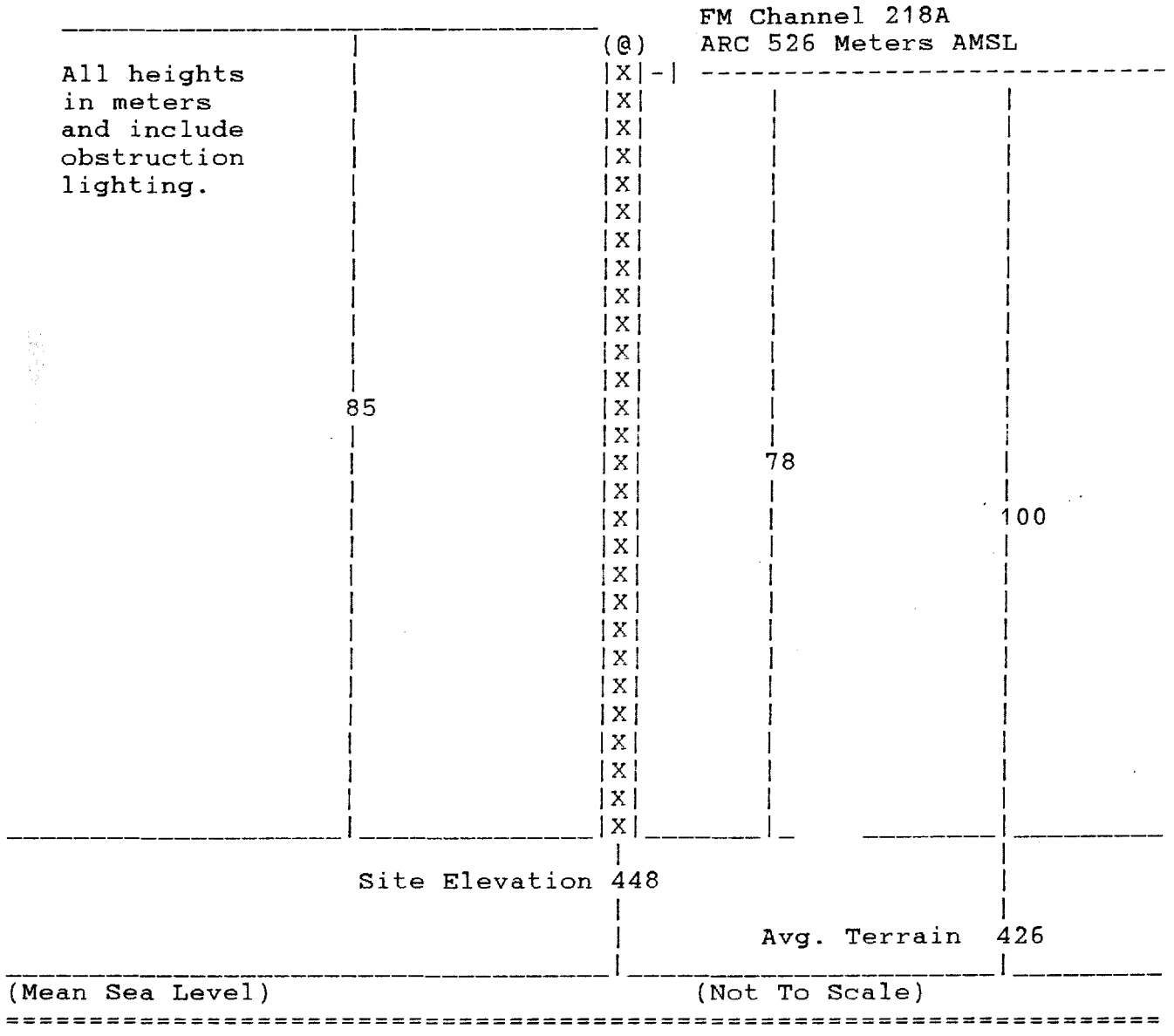
Exhibit E-1
Arrowhead Ministries, Inc.
Binghamton, New York,
Vertical Plan Sketch

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

Overall Structure Height
533 Meters AMSL

All heights in meters and include obstruction lighting.

FM Channel 218A
ARC 526 Meters AMSL



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 E-2 - Figure 1
Arrowhead Ministries, Inc.
Binghamton, New York
Site Map - Reduced

JOHNSON CITY
Willow Point
SUSQUEHANNA
BINGHAMTON
VESTAL
BINGHAMTON
Park Place
Hillcrest Park
Ross Park
Ross Park Zoo
Otsiningo Park
Otsiningo Park Zoo
Highland Park
Recreation Park
Chenango River
Susquehanna River
Castle Creek
Rattlesnake Creek
Tiger Creek
Tiger Creek Ridge
Rattlesnake Ridge
Hickory Hill
Hickory Hill Cemetery
Hickory Hill Park
Hickory Hill Park Golf Course
Hickory Hill Park Zoo
Hickory Hill Park Pond
Hickory Hill Park Picnic Area
Hickory Hill Park Playground
Hickory Hill Park Swimming Pool
Hickory Hill Park Tennis Courts
Hickory Hill Park Baseball Diamond
Hickory Hill Park Ski Area
Hickory Hill Park Ski Jump
Hickory Hill Park Ski Tow
Hickory Hill Park Ski Lodge
Hickory Hill Park Ski Shop
Hickory Hill Park Ski Rental
Hickory Hill Park Ski Instruction
Hickory Hill Park Ski Patrol
Hickory Hill Park Ski Trail
Hickory Hill Park Ski Trail Map
Hickory Hill Park Ski Trail Map Key
Hickory Hill Park Ski Trail Map Legend
Hickory Hill Park Ski Trail Map Scale
Hickory Hill Park Ski Trail Map Date
Hickory Hill Park Ski Trail Map Source
Hickory Hill Park Ski Trail Map Author
Hickory Hill Park Ski Trail Map Publisher
Hickory Hill Park Ski Trail Map Copyright
Hickory Hill Park Ski Trail Map Edition
Hickory Hill Park Ski Trail Map Revision
Hickory Hill Park Ski Trail Map Revision Date
Hickory Hill Park Ski Trail Map Revision Source
Hickory Hill Park Ski Trail Map Revision Author
Hickory Hill Park Ski Trail Map Revision Publisher
Hickory Hill Park Ski Trail Map Revision Copyright
Hickory Hill Park Ski Trail Map Revision Edition
Hickory Hill Park Ski Trail Map Revision Revision
Hickory Hill Park Ski Trail Map Revision Revision Date
Hickory Hill Park Ski Trail Map Revision Revision Source
Hickory Hill Park Ski Trail Map Revision Revision Author
Hickory Hill Park Ski Trail Map Revision Revision Publisher
Hickory Hill Park Ski Trail Map Revision Revision Copyright
Hickory Hill Park Ski Trail Map Revision Revision Edition
Hickory Hill Park Ski Trail Map Revision Revision Revision
Hickory Hill Park Ski Trail Map Revision Revision Revision Date
Hickory Hill Park Ski Trail Map Revision Revision Revision Source
Hickory Hill Park Ski Trail Map Revision Revision Revision Author
Hickory Hill Park Ski Trail Map Revision Revision Revision Publisher
Hickory Hill Park Ski Trail Map Revision Revision Revision Copyright
Hickory Hill Park Ski Trail Map Revision Revision Revision Edition
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Date
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Source
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Author
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Publisher
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Copyright
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Edition
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Date
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Source
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Author
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Publisher
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Copyright
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Edition
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Date
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Source
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Author
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Publisher
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Copyright
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Edition
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Date
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Source
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Author
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Publisher
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Copyright
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Edition
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Date
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Source
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Author
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Publisher
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Copyright
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Edition
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Date
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Source
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Author
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Publisher
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Copyright
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Edition
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Date
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Source
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Author
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Publisher
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Copyright
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Edition
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Date
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Source
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Author
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Publisher
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Copyright
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Edition
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Date
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Source
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Author
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Publisher
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Copyright
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Edition
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Date
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Source
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Author
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Publisher
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Copyright
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Edition
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Date
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Source
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Author
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Publisher
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Copyright
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Edition
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Date
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Source
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Author
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Publisher
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Copyright
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Edition
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Date
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Source
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Author
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Publisher
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Copyright
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Edition
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Date
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Source
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Author
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Publisher
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Copyright
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Edition
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Date
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Source
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Author
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Publisher
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Copyright
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Edition
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Date
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Source
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Author
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Publisher
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Copyright
Hickory Hill Park Ski Trail Map Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Revision Edition
Hickory Hill Park Ski Trail Map Revision

Exhibit E-2 - Figure 2
Arrowhead Ministries, Inc.
Binghamton, New York
Site Map - Full Scale

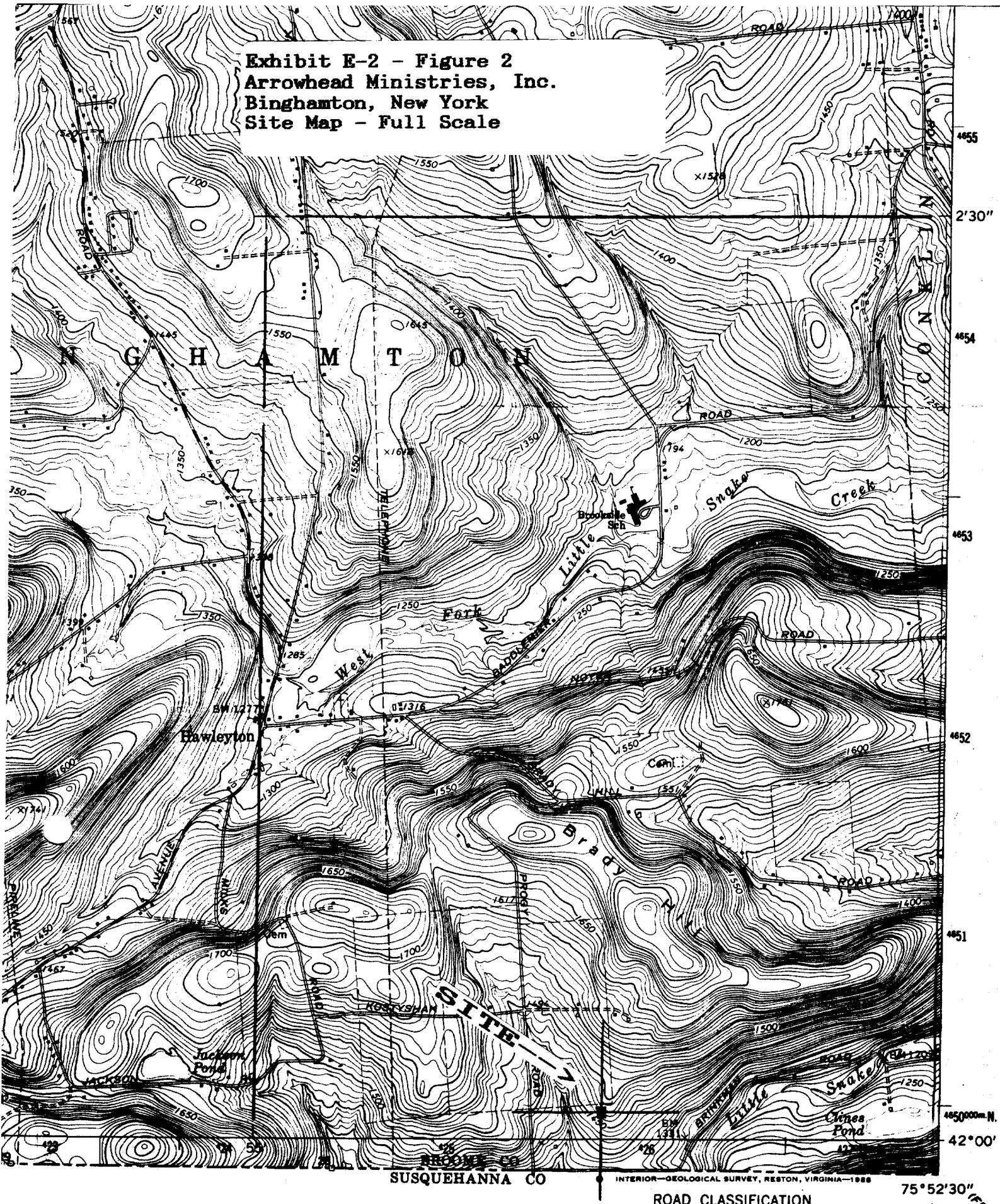


Exhibit E-3
Arrowhead Ministries, Inc.
Binghamton, New York
Service Contour Map & Map Showing Percent Of Change

Figure 1 is a full scale reproduction of the pertinent portion of the New York Sectional Aeronautical Chart which shows:

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

(b) the 60 dBu (1.0 mV/m) contour; and

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

Figure 2 is a full scale reproduction of the pertinent portion of the New York Sectional Aeronautical Chart which shows, in addition to the above items, the original (dashed line) 60 dBu contour.

A polar planimeter was used to accurately determine the original and amended 60 dBu contours and gain and loss areas:

(a) Original 60 dBu contour[1] is 1,440.3 sq. km. (556.1 sq. mi.).

(b) Amended 60 dBu contour is 1,331 sq. km. (513.9 sq. mi.)

(c) Gain area was determined to be: 12.1 sq. mi.

(d) Loss area was determined to be: 46.5 sq. mi.

(e) Total change in area was determined to be: 58.6 sq. mi.

(f) Percent change in area was determined to be: 10.5 percent

---

[1] If the area as shown in the original application is used, 1,363 square kilometers (526.37 square miles), the extent of change is 11 percent.

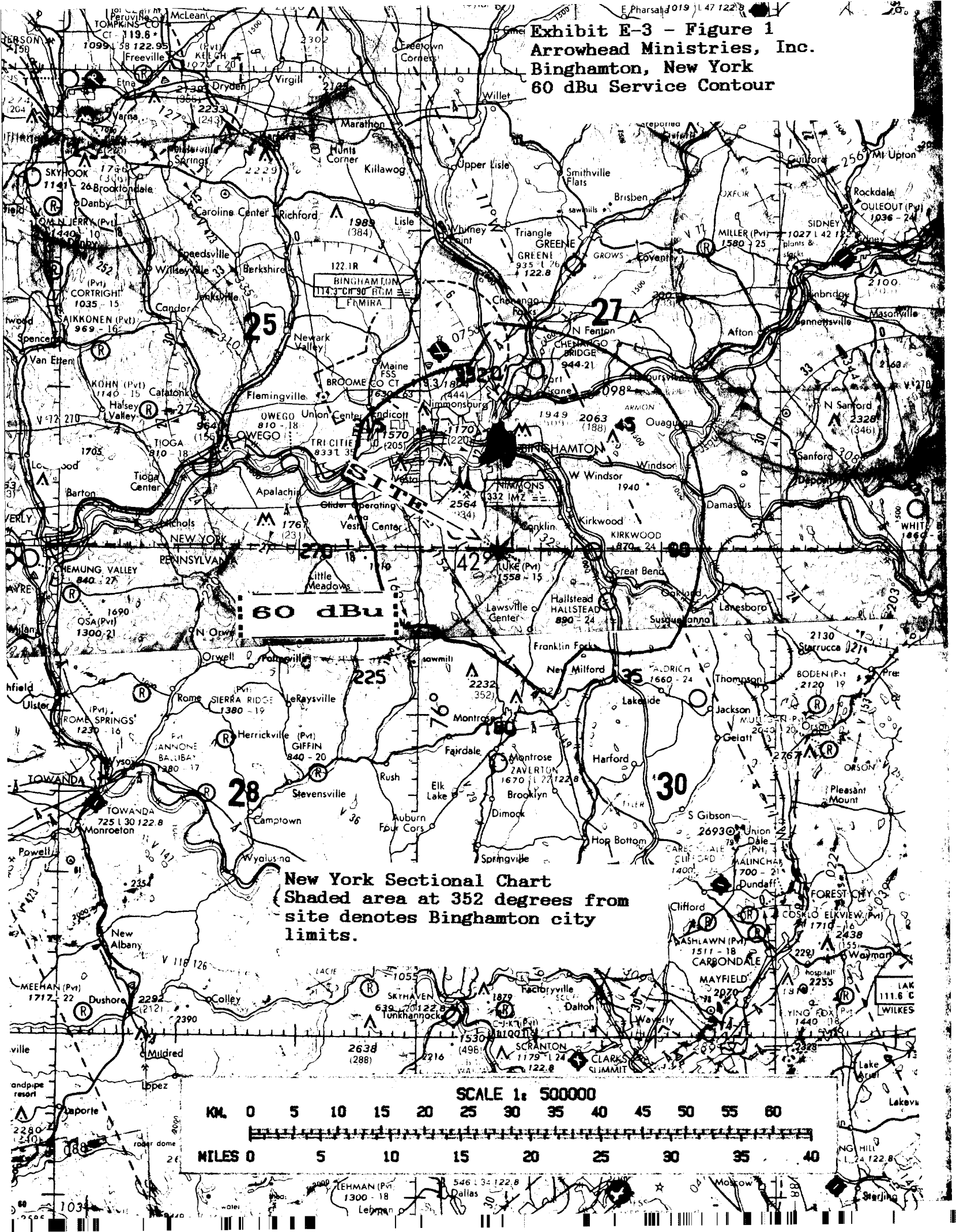


Exhibit E-3 - Figure 1
Arrowhead Ministries, Inc.
Binghamton, New York
60 dBu Service Contour

New York Sectional Chart
Shaded area at 352 degrees from
site denotes Binghamton city
limits.

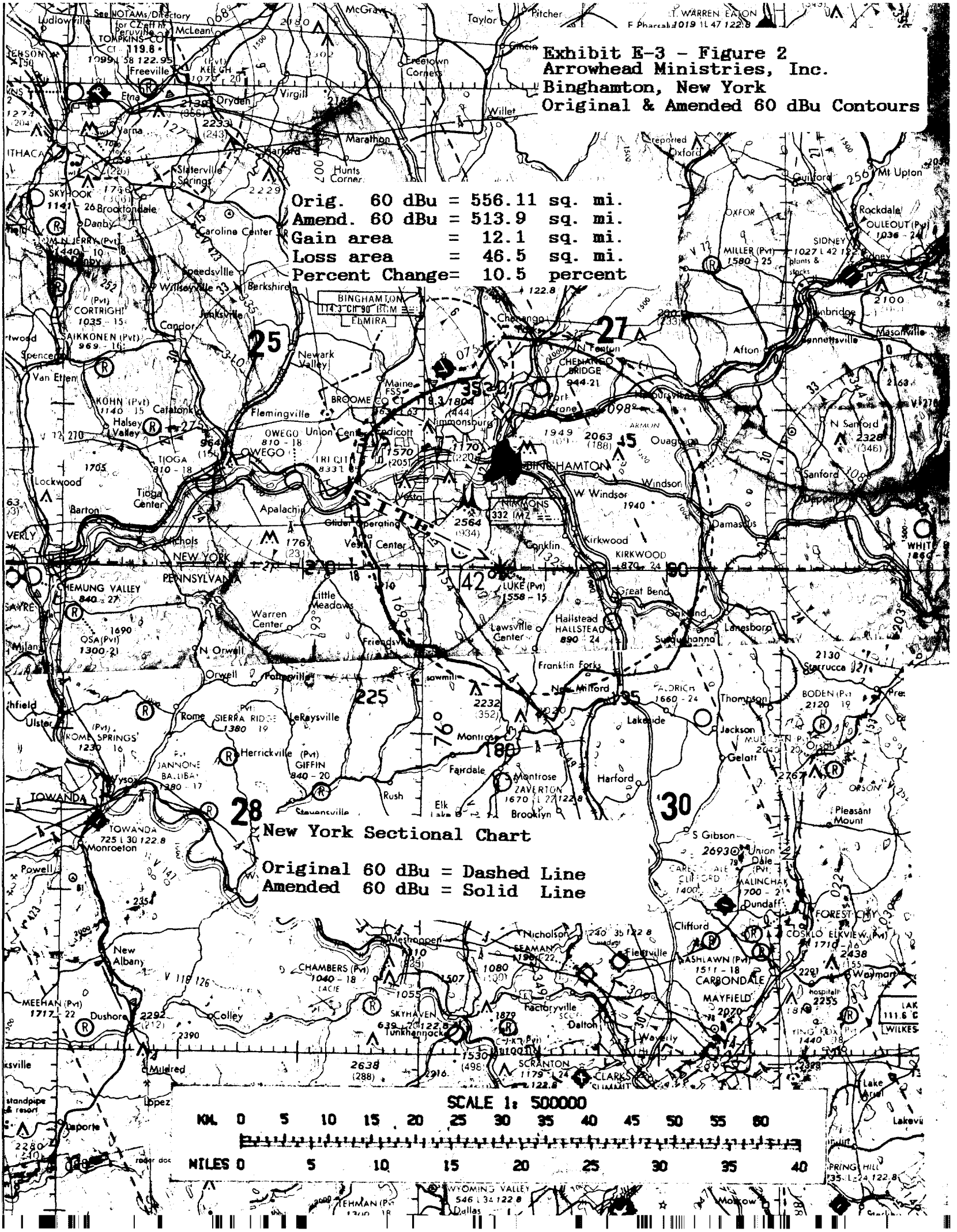


Exhibit E-3 - Figure 2
Arrowhead Ministries, Inc.
Binghamton, New York
Original & Amended 60 dBu Contours

Exhibit E-4 - Figure 1
Arrowhead Ministries, Inc.
Binghamton, New York
Tabulation Of Contour Calculations

NEW BINGHAMTON NY ; ED-27 1813T 1813C ; 910814 ;
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	1.2	175.26	26.247	74.809	38.352	8.0216	2.0326	8.343	
45	1.2	174.04	26.157	74.635	38.207	7.9907	2.0276	8.2947	
90	1.2	132.59	23.064	68.371	33.095	6.9957	1.8763	7.1994	
135	1.2	74.677	16.275	57.087	25.315	5.1734	1.4985	5.331	
180	1.2	40.539	12.588	44.31	17.613	3.805	.88186	3.9204	
225	1.2	38.1	12.266	43.145	16.89	3.6897	.83444	3.8051	
270	1.2	50.597	13.915	48.874	20.526	4.2826	1.1076	4.3987	
315	1.2	115.22	21.412	65.252	30.951	6.4818	1.7896	6.6841	
120	1.2	125.27	22.515	67.193	32.164	6.8305	1.853	7.0327	
130	1.2	93.88	18.709	61.145	27.977	5.7721	1.6386	5.9337	
140	1.2	58.218	14.921	52.627	22.666	4.6475	1.3164	4.764	
150	1.2	60.961	15.283	53.837	23.422	4.7794	1.4009	4.9183	
160	1.2	90.527	18.284	60.474	27.51	5.6654	1.6172	5.8261	
170	1.2	54.865	14.479	51.05	21.731	4.4865	1.2201	4.6029	
190	1.2	22.555	11.261	39.247	15.284	3.3321	.70224	3.4472	
200	1.2	25.908	11.261	39.247	15.284	3.3321	.70224	3.4472	
210	1.2	35.357	11.904	41.788	15.927	3.5607	.78414	3.6759	
220	1.2	32.004	11.461	40.057	15.484	3.4031	.72676	3.5182	
230	1.2	49.378	13.754	48.229	20.178	4.2244	1.0774	4.3404	
352.41	1.2	118.5	21.829	65.941	31.411	6.6163	1.8152	6.8181	- Binghamton
	AREAS, Sq. Km. :		1229.5[1]	11613	2608.1	114.8	7.8194	122.73	

OVERALL HEIGHT ABOVE AVERAGE TERRAIN = 100.13 (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 = .27 MILES, .43 KM.
CALCULATED PURSUANT TO R&R 73.318(a) FOR MAXIMUM ERP.

---

[1] The 60 dBu area was determined to be 1,331 square kilometers with a planimeter.

Exhibit E-4 - Figure 2
Arrowhead Ministries, Inc.
Binghamton, New York
Terrain Averaging Program

TERRAIN AVERAGING PROGRAM
BASED ON NGDC 30 SECOND DATABASE

1813-196 NEW BINGHAMPTON NY

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
120	400	1314
130	432	1417
140	468	1534
150	465	1525
160	435	1428
170	471	1545
190	503	1651
200	500	1640
210	490	1609
220	494	1620
230	476	1563
AVERAGE:	426	1397

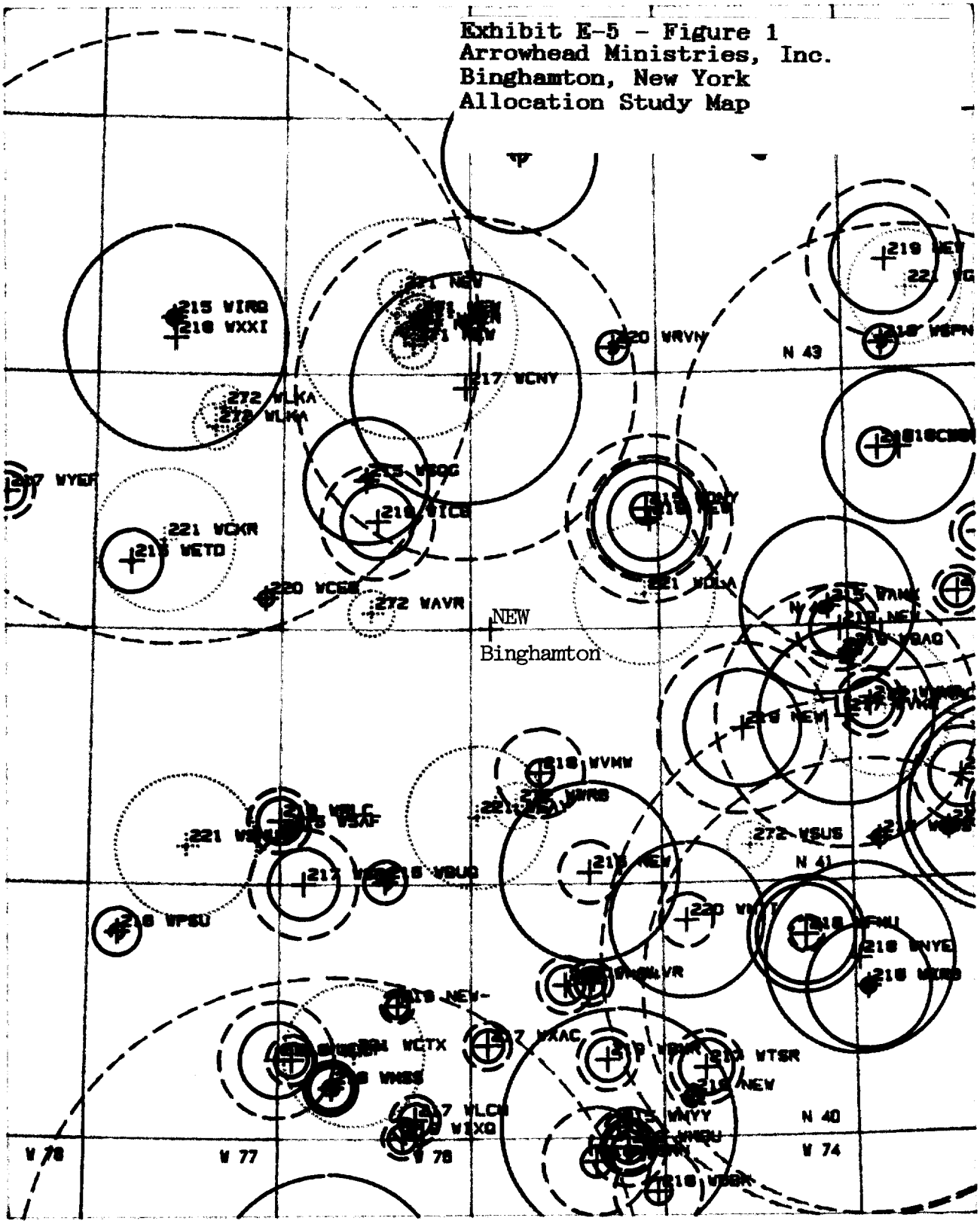
Exhibit E-5 (Amended August 1991)
Arrowhead Ministries, Inc.
Binghamton, New York
Allocation Study

The purpose of this amendment is a reduction in effective radiated power proposed by the applicant from 1.5 kilowatts to 1.2 kilowatts.

Figures 1 and 2 of this exhibit have been revised to show existing allocations and the protected and interfering contours of the proposed facility to other facilities and allotments. Figures 3 - 5 are included with this revision to facilitate identification of the facilities shown on the allocation maps.

The contours of WUCI Binghamton, New York, have been omitted, because this application is mutually exclusive with the license renewal of WUCI.

NEW BINGHAMTON NY ! 910815 ! CHANNEL 218A REF. N420005 W755343



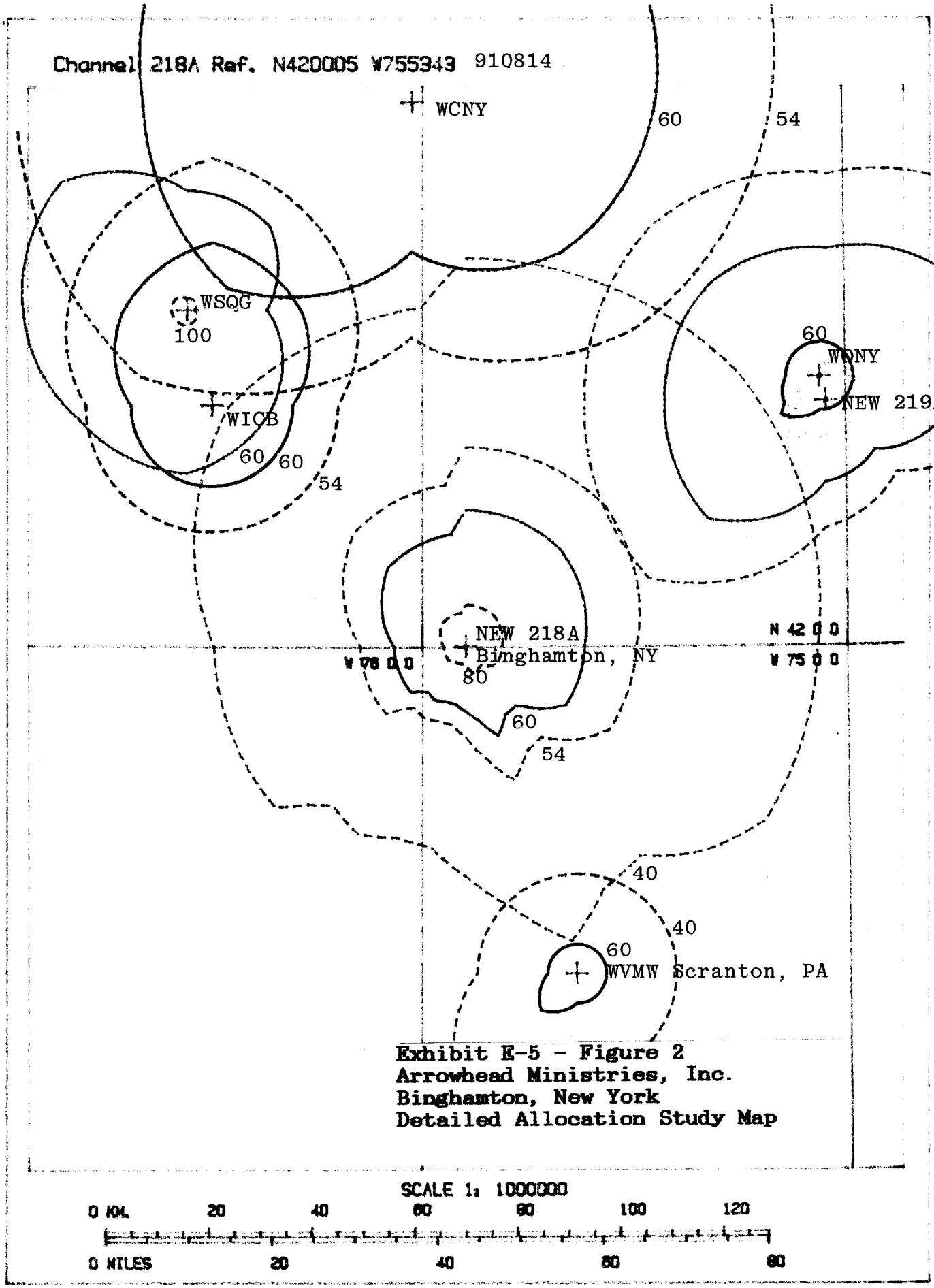


Exhibit E-5 - Figure 2
Arrowhead Ministries, Inc.
Binghamton, New York
Detailed Allocation Study Map

IDENTIFICATION OF FACILITIES AND CONTOURS ON ALLOCATION MAP

NEW BINGHAMTON NY ¦ 910815 ¦

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

EDUCATIONAL FM ALLOCATION STUDY FOR CHANNEL 218 A
(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	W6AJ	Stroudsburg, PA	D CP	78.787	126.79	151.44	0	0		
216B1	NEW	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	WYEP	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 E-5 - Figure 3
Arrowhead Ministries, Inc.
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	See Exhibit E-5, Page 1
218B1	WUCI	Binghamton NY	B1AP	4.9093	7.9007	328.9	.97	192	See Exhibit E-5, Page 1
218B	WXXI	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=1.686mi.
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.
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 30.9km/19.231mi

Exhibit E-5 - Figure 4
Arrowhead Ministries, Inc.
Binghamton, New York
Identification Of Facilities
Cont'd

CHAN	CALL	CITY AND STATE	CL/TYP	MILES	KM.	AZIMUTH	ERP	HAAT(M)	RELEVANT CONTOURS AND DISTANCES
221D	WGFR	Glens Falls NY	D LI	145.88	234.77	50.807	.01	19	REQUIRED SEPARATION 24.9km/15.503mi
221A	WDLA	Walton NY	A LI	42.946	69.114	77.178	.69	200	REQUIRED SEPARATION 30.9km/19.231mi
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 47.9km/29.795mi
221A	WCKR	Hornell NY	A LI	91.984	148.03	285.53	1.25	156	REQUIRED SEPARATION 30.9km/19.231mi
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 30.9km/19.231mi
221A	WEAY	Nanticoke PA	A CP	51.169	82.348	184.22	.76	202	REQUIRED SEPARATION 30.9km/19.231mi
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 30.9km/19.231mi
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 30.9km/19.231mi
221A	WSNU	Lock Haven PA	A AP	101.51	163.36	234.92	3	100	REQUIRED SEPARATION 30.9km/19.231mi
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 9.9km/6.1826mi
271A	NEW	Phoenix NY	A AP	79.559	128.03	344.87	3	100	REQUIRED SEPARATION 9.9km/6.1826mi
271A	NEW	Phoenix NY	A AP	94.297	151.75	345.24	3	100	REQUIRED SEPARATION 9.9km/6.1826mi
271A	NEW	Phoenix NY	A AP	86.592	139.35	347.09	3	100	REQUIRED SEPARATION 9.9km/6.1826mi
271A	NEW	Phoenix NY	A AP	86.68	139.49	347.4	3	100	REQUIRED SEPARATION 9.9km/6.1826mi
271A	NEW	Phoenix NY	A AP	85.315	137.30	347.03	3	100	REQUIRED SEPARATION 9.9km/6.1826mi
271A	NEW	Phoenix NY	A AP	83.024	133.61	343.9	3	100	REQUIRED SEPARATION 9.9km/6.1826mi
272A	WSUS	Franklin NJ	A LI	91.89	147.88	129.76	.59	227	REQUIRED SEPARATION 9.9km/6.1826mi
272A	WAVR	Waverly NY	A LI	32.656	52.554	277.76	1.5	122	REQUIRED SEPARATION 9.9km/6.1826mi
272A	WLKA	Canandaigua NY	A LI	94.154	151.52	309.76	3	87	REQUIRED SEPARATION 9.9km/6.1826mi
272A	WLKA	Canandaigua NY	A CP	92.827	149.39	306.51	.46	244	REQUIRED SEPARATION 9.9km/6.1826mi
272A	WWRB	Pittston PA	A LI	48.525	78.093	171.72	3	22	REQUIRED SEPARATION 9.9km/6.1826mi

Exhibit E-5 - Figure 5
Arrowhead Ministries, Inc.
Binghamton, New York
Identification Of Facilities
Cont'd

Exhibit ANSI-01
Arrowhead Ministries, Inc.
Binghamton, New York
Statement Why Environmental Assessment Is Not Required

The proposed construction does not require any action covered by Section 1.1307 of the Commission's Rules.

As further evidence that the proposed antenna construction complies with "ANSI" standards regarding human exposure to non-ionizing radiation, the following is shown:

POWER DENSITY CALCULATION FOR

NEW FM218A 1.2 kW H&V AT 100 METERS H.A.A.T.

BASED ON "WORST CASE" VALUES FROM OST #65

The antenna center of radiation ("C/R") is 78 meters above ground level. A point that is 78 meters (255.84 feet) from the C/R of a 1,200 Watt array at a vertical radiation angle of 90 degrees receives 1.317938E-02 milliwatts per centimeter squared. The maximum allowable ANSI/FCC limit is 1.0 mW/cm squared. The expected power density at 78 meters will be 1.317938 percent of the maximum allowable under the restrictions mandated by ANSI C95.1-1982.

The facility will be shut down when equipment maintenance would require workers to be exposed to levels of non-ionizing radiation in excess of 1.0 mW/cm squared. This would occur at a distance of approximately 9 meters or less from the antenna radiation center.

SECTION VI – EQUAL EMPLOYMENT OPPORTUNITY PROGRAM

1. Does the applicant propose to employ five or more full-time employees? ☐ Yes ☐ No

If Yes, the applicant must include an EEO program called for in the separate Broadcast Equal Employment Opportunity Program Report (FCC 396-A).

SECTION VII – CERTIFICATION

1. Has or will the applicant comply with the public notice requirements of 47 C.F.R. Section 73.3580? ☒ Yes ☐ No

The APPLICANT hereby waives any claim to the use of any particular frequency as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application. *(See Section 304 of the Communications Act of 1934, as amended.)*

The APPLICANT acknowledges that all the statements made in this application and attached exhibits are considered material representations, and that all exhibits are a material part hereof and incorporated herein.

The APPLICANT represents that this application is not filed for the purpose of impeding, obstructing, or delaying determination on any other application with which it may be in conflict.

In accordance with 47 C.F.R. Section 1.65, the APPLICANT has a continuing obligation to advise the Commission, through amendments, of any substantial and significant changes in information furnished.

WILLFUL FALSE STATEMENTS MADE ON THIS FORM ARE PUNISHABLE BY FINE AND IMPRISONMENT. U.S. CODE, TITLE 18, SECTION 1001.

I certify that the statements in this application are true and correct to the best of my knowledge and belief, and are made in good faith.

Name of Applicant	Title
Arrowhead Ministries, Inc.	Asst. Secretary, Executive Director
Signature David A. Martin	Date 8/21/91

FCC NOTICE TO INDIVIDUALS REQUIRED BY THE PRIVACY ACT AND THE PAPERWORK REDUCTION ACT

The solicitation of personal information requested in this application is authorized by the Communications Act of 1934, as amended. The principal purpose for which the information will be used is to determine if the benefit requested is consistent with the public interest. The staff, consisting variously of attorneys, analysts, engineers and applications examiners, will use the information to determine whether the application should be granted, denied, dismissed, or designated for hearing. If all the information is not provided, the application may be returned without action having been taken upon it or its processing may be delayed while a request is made to provide the missing information. Accordingly, every effort should be made to provide all necessary information. Your response is required to obtain the requested authority.

Public reporting burden for this collection of information is estimated to vary from 76 to 80 hours with an average of 78 hours 04 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, can be sent to the Federal Communications Commission, Office of Managing Director, Washington, D.C. 20554, and to the Office of Management and Budget, Paperwork Reduction Project (3060-0034), Washington, D.C. 20503.

THE FOREGOING NOTICE IS REQUIRED BY THE PRIVACY ACT OF 1974, P.L. 93-579, DECEMBER 31, 1974, 5 U.S.C. 552a(e)(3), AND THE PAPERWORK REDUCTION ACT OF 1980, P.L. 96-511, DECEMBER 11, 1980, 44 U.S.C. 3507.