FEDERAL COMMUNICATIONS COMMISSION

CLASS OF STATION FM STH

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

ST	FILE NUMBER	CALL	APPLICANT AND LOCATION	NATURE OF APPLICATION
IN	BPED -901203MN N/M	NEW 91.1MHZ	FAITH CHRISTIAN ACADEMY BERNE IN	CP FOR NEW EDUCATIONAL FM ON: 91.1 MHZ; ERP: 25.0 KW H&V HAAT: 100 METERS H&V 40 44 50 85 10 21

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

ORIGINAL

STERLING COMMUNICATIONS, INC.
P.O. Box 80484
Chattanooga, Tennessee 37411-7484
(615) 899-9393

RECEIVED
DEC 3 - 1990
Federal Communications Commission
Office of the Secretary

November 21, 1990

Office of the Secretary
FEDERAL COMMUNICATIONS COMMISSION
1919 M. Street, N.W., Room 222
Washington, DC 20554

RE: Application For Construction Permit; Faith Christian Academy; For A New Non-commercial Educational FM Radio Station At Berne, Indiana

Dear Mrs. Searcy:

Enclosed please find an original and two copies of an Application For Construction Permit, tendered for filing on behalf of the above referenced applicant.

If you or any members of your staff have any questions concerning the enclosed, please communicate directly with the undersigned.

Thank you for your cooperation in this matter.

Sincerely,

James E. Price
Technical Consultant

Enclosure
JEP/mlc

cc: Rev. Doug Rogers, Faith Christian Academy

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

code 3D PN: 12/18/90

For Commission Use Only
File No. BPED-901203MN

Section I - GENERAL INFORMATION

RECEIVED
DEC 3 - 1990
Federal Communications Commission
Office of the Secretary

1. Name of Applicant			Send notices and communications to the following person at the address below:		
Faith Christian Academy			Name: Rev. Douglas Rogers		
Street Address or P.O. Box: P.O. Box 347			Street Address or P.O. Box: P.O. Box 347		
City: Berne	State: IN	ZIP Code: 46711	City: Berne	State: IN	ZIP Code: 46711
Telephone No. (Include Area Code): (219) 589-3797			Telephone No. (Include Area Code): (219) 589-3797		

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

(a) Channel No. or Frequency	(b) Principal Community	City	State
216 91.1		Berne	IN

(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: _____

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

91.1MHZ
BPED -901203MN NEW
BERNE IN
FAITH CHRISTIAN ACADEMY

Section II - LEGAL QUALIFICATIONS

Name of Applicant

Faith Christian Academy

1. Applicant is: *(Check one box below)*

   ☐ (a) governmental or public educational agency, board or institution

   ☒ (b) private nonprofit educational institution

   ☐ (c) Other *(specify)*

2. For applicants 1(c) only, describe in an Exhibit the nature and educational purposes of the applicant. — Exhibit No.

3. For applicants 1(c) applying for a new noncommercial educational television station only, describe in an Exhibit how the applicant's officers, directors and members of its governing board are broadly representative of the educational, cultural and civic segments of the principal community to be served. — Exhibit No.

4. Describe in an Exhibit how the proposed station will be used, in accordance with 47 C.F.R. Section 73.503 or Section 73.621, for the advancement of an educational program. — Exhibit No. A-1

5. Is there any provision contained in any by-laws, articles of incorporation, partnership agreement, charter, statute or other document which would restrict the applicant in advancing an educational program or complying with any Commission rule, policy or provision of the Communications Act of 1934, as amended? — ☐ Yes ☒ No

   If Yes, provide particulars in an Exhibit. — Exhibit No.

CITIZENSHIP AND OTHER STATUTORY REQUIREMENTS

6. (a) Is the applicant in violation of the provisions of Section 310 of the Communications Act of 1934, as amended, relating to interests of aliens and foreign governments? (See Instruction B to Section II.) — ☐ Yes ☒ No

   (b) Will any funds, credits or other financial assistance for the construction, purchase or operation of the station(s) be provided by aliens, foreign entities, domestic entities controlled by aliens, or their agents? — ☐ Yes ☒ No

   If the answer to (b) above is Yes, attach an Exhibit giving full disclosure concerning this assistance. — Exhibit No.

7. (a) Has an adverse finding been made or an adverse final action taken by any court or administrative body as to the applicant or any party to this application in a civil or criminal proceeding brought under the provisions of any law related to the following:

   Any felony; broadcast related antitrust or unfair competition; criminal fraud or fraud before another governmental unit; or discrimination? — ☐ Yes ☒ No

   (b) Is there now pending in any court or administrative body any proceeding involving any of the matters referred to in (a) above? — ☐ Yes ☒ No

   If the answer to (a) and/or (b) above is Yes, attach an Exhibit giving full disclosure concerning persons and matters involved, including an identification of the court or administrative body and the proceeding (by dates and file numbers), a statement of the facts upon which the proceeding is or was based or the nature of the offense alleged or committed, and a description of the current status or disposition of the matter. — Exhibit No.

PARTIES TO APPLICATION

8. Complete the following Table with respect to all parties to this application:

(NOTE: **If the applicant** considers that to furnish complete information would pose an unreasonable burden, it may request that the Commission waive the strict terms of this requirement with appropriate justification.)

INSTRUCTIONS: If applicant is a corporation or an unincorporated association with 50 or fewer stockholders, stock subscribers, holders of membership certificate or other ownership interest, fill out all columns, giving the information requested as to all officers, directors and members of governing board. In addition, give the information as to all persons or entities who are the beneficial or record owners of or have the right to vote capital stock, membership or ownership interests or are subscribers to such interests. **If the applicant has more than 50 stockholders, stock subscribers or holders of membership certificates or other ownership interests,** furnish the information as to officers, directors, members of governing board, and all persons or entities who are the beneficial or record owners of or have the right to vote 1% or more of the capital stock, membership or ownership interests. **If applicant is a governmental or public educational agency, board or institution,** fill out columns (a), (b), and (c) as to all members of the governing board and chief executive officers.

Name and Residence Address(es) (a)	Office Held (b)	Director or Member of Governing Board (c) YES	NO	% of: Ownership (O) or Voting Stock (VS) or Membership (M) (d)
Rev. Douglas Paul Rogers RR 2, Box 204A Geneva, IN 46740	Chairman	Yes		20% (M)
Bruce Lehman RR 2, Box 6 Berne, IN 46711	Board Member	Yes		20% (M)
Brian Lehman RR 2, Box 326 Berne, IN 46711	Board Member	Yes		20% (M)
Darrell Kiefer RR 1, Box LG-37 Berne, IN 46711	Secretary	Yes		20% (M)
Tom Lynch RR 1, Box 18 Berne, IN 46711	Treasurer	Yes		20% (M)

9. Does the applicant or any party to this application have, or have they had, any interest in:

(a) a broadcast station, or pending broadcast station application before the Commission? ☐ Yes ☒ No

(b) a broadcast application which has been dismissed with prejudice by the Commission? ☐ Yes ☒ No

(c) a broadcast application which has been denied by the Commission? ☐ Yes ☒ No

(d) a broadcast station, the license of which has been revoked? ☐ Yes ☒ No

(e) a broadcast application in any pending or concluded Commission proceeding which left unresolved character issues against the applicant? ☐ Yes ☒ No

If the answer to any of the questions in (a)-(e) above is Yes, state in an Exhibit the following information: Exhibit No.

(1) Name of party having interest;
(2) Nature of interest or connection, giving dates;
(3) Call letters of stations or file number of application or docket; and
(4) Location.

SECTION III - FINANCIAL QUALIFICATIONS

Note: If this application is for a change in an operating facility, DO NOT fill out this Section.

1. Is this application contingent upon receipt of a grant from the National Telecommunications and Information Administration? ☐ Yes ☒ No

2. Is this application contingent upon receipt of a grant from a charitable organization, the approval of the budget of a school or university, or an appropriation from a state, county, municipality or other political subdivision? ☐ Yes ☒ No

NOTE: If either Questions 1 or 2 is answered "Yes," your application cannot be granted until all of the necessary funds are committed or appropriated. In the case of grants from the National Telecommunications and Information Administration, no further action on your part is required. If you rely on funds from a source specified in Question 2, **you must advise the F.C.C. when the funds are committed or appropriated.** This should be accomplished by letter amendment to your application, in triplicate, signed in the same manner as the original application, and clearly identifying the application to be amended.

3. The applicant certifies, except as noted above, that sufficient net liquid assets are on hand or that sufficient funds are available from committed sources to construct and operate the requested facilities for three months without additional funds. ☒ Yes ☐ No

SECTION IV - PROGRAM SERVICE STATEMENT

Attach as an Exhibit, a brief description, in narrative form, of the planned programming service relating to the issues of public concern facing the proposed service area.

Exhibit No. A-2

NOTE: No program service statement need be filed where the proposed station's programming would be **wholly** "instructional" as that type of programming is defined in the Instructions to this Section.

Exhibit A-1
Faith Christian Academy
Berne, Indiana
Advancement Of An Educational Program

Through its operation of the new station proposed herein, Faith Christian Academy, will be able to provide a much needed broadcasting service to the community of Berne, Indiana.

The applicant proposes to create and cultivate an educational program designed to encourage listeners to fulfill their own educational needs.

Educational programs will be broadcast throughout the broadcast day and will include instructional programs, documentaries, in-depth news reports, music, drama, and ministerial programs.

One of the applicant's primary goals is to place a new and much needed emphasis on morality and honesty. By combining this goal with all types of educational and instructional programs, Faith Christian Academy, hopes to become a source of reliable information, which will help and inspire listeners.

Exhibit A-2
Faith Christian Academy
Berne, Indiana
Planned Programming Service

The applicant proposes to offer regularly-scheduled newscasts on a daily basis. News programming will be supplemented by public affairs programming and public service announcements to be scheduled on a weekly basis.

The applicant's officers and directors are long-time residents of the Berne, Indiana, area. By the very nature of the activity of Faith Christian Academy, its officers and directors are in an unique position to ascertain and address the problems, needs and interests of the community.

Non-entertainment programming by the proposed station will be designed to address the needs and interests of Berne, Indiana, residents, as determined by the applicant's regular and frequent contact with members of the community through its officers, directors and employees.

The applicant commits to provide a balanced presentation of viewpoints on controversial issues of public importance.

Exhibit A-3
Faith Christian Academy
Berne, Indiana
Model Equal Employment Opportunity Program

I. General Policy

It will be our policy to provide equal employment to all qualified individuals without regard to their race, color, religion, national origin or sex in all personnel actions including recruitment, evaluation, selection, promotion, compensation, training and termination.

It will also be our policy to promote the realization of equal employment opportunity through a positive, continuing program of specific practices designed to ensure the full realization of equal employment opportunity without regard to race, color, religion, national origin or sex.

To make this policy effective, and to ensure conformance with the Rules and Regulations of the Federal Communications Commission. We have adopted an Equal Employment Opportunity Program which includes the following elements:

II. Responsibility for Implementation

Douglas Paul Rogers will be responsible for the administration and implementation of our Equal Employment Opportunity Program. It will also be the responsibility of all persons making employment decisions with respect to recruitment, evaluation, selection, promotion, compensation, training and termination of employees to ensure that our policy and program is adhered to and that no person is discriminated against in employment because of race, color, religion, national origin or sex.

III. Policy Dissemination

To assure that all members of the staff are cognizant of our equal employment opportunity policy and their individual responsibilities in carrying out this policy, the following communication efforts will be made.

(x) The station's employment form will contain a notice informing prospective employees that discrimination because of race, color, notify the appropriate local, State or Federal agency if they believe that they have been the victims of discrimination.

(x) Appropriate notices will be posted informing applicants and employees that the station is an Equal Opportunity Employer and of their right to notify an appropriate local, State, or Federal agency if they believe they have been the victims of discrimination.

(x) We will seek the cooperation of unions. If represented at the station, to help implement our EEO program and all union contracts will contain a non discrimination clause.

IV. Recruitment

To ensure non discrimination in relation to minorities and women, and to foster their full consideration in filling job vacancies, we propose to utilize the following recruitment procedures:

(x) We will attempt to maintain systematic communications, both orally and in writing, with a variety of minority and women's organizations to encourage the referral of qualified minority and female applicants.

1. Association For Handicapped Artists
2. Blind Association of Indiana
3. YWCA
4. League of Women Voters

(x) In addition to the organizations noted above, which specialize in minority and female candidates, we will deal only with employment services, including State employment agencies, which refer job candidates without regard to their race, color, religion, national origin or sex. Examples of these employment referral services are:

1. Intercristo
2. Indiana Department of Employment Security

(x) When we recruit prospective employees from educational institutions such recruitment efforts will include area schools and colleges with significant minority and female enrollments. Educational institutions to be contacted for recruitment purposes are:

1. Ball State University
2. Hyles-Anderson College
3. Fort Wayne Bible College
4. Moody Bible Institute

(x) When utilizing media for recruitment purposes, help-wanted advertisements will always include a notice that we are an Equal Opportunity Employer and will contain no indication, either explicit or implied, of a preference for one sex or another.

(x) When we place employment advertisements in printed media some of such advertisements will be placed in media which have significant circulation or are of particular interest to

minorities and women. Examples of publications to be utilized are:

1. Bluffton News-Banner
2. Decatur Daily Democrat

(x) We will encourage employees, particularly minority and female employees, to refer minority and female candidates for existing and future openings.

V. Training

(x) We will provide on-the-job training to upgrade the skills of employees.

(x) We will provide assistance to students, schools or colleges in programs designed to enable minorities and women to compete in the broadcast employment market on an equitable basis:

School or Other Beneficiary	Scholarship aid
1. Hyles-Anderson College	To be determined

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

Name of Applicant

Faith Christian Academy

Call letters *(if issued)*

Is this application being filed in response to a window? ☐ Yes ☒ No

If Yes, specify closing date: _____

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

- ☒ 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

If 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) _____

1. Allocation:

Channel No.	Principal community to be served:		
	City	County	State
216	Berne	Adams	IN

Class *(check only one box below)*

☐ 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.

Existing tower; 21.08 kM at 298 degrees True from Berne, IN; Wells County

(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	40°	44'	50"	Longitude	85°	10'	21"

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

If Yes, give call letter(s) or file number(s) or both. WNUY BPH-881205ID

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.

Date July 18, 1990 Office where filed AGL Des Plaines, IL

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)	Miller	6.5	238
(b)			

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

(1) of site above mean sea level; 246 meters

(2) of the top of supporting structure above ground (including antenna, all other appurtenances, and lighting, if any); and 128 meters

(3) of the top of supporting structure above mean sea level [(a)(1) + (a)(2)] 374 meters

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

(1) above ground 105 meters (H)
105 meters (V)

(2) above mean sea level [(a)(1) + (b)(1)] 351 meters (H)
351 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 25.0 kw (H*) 25.0 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? [X] 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. E-2

11. Will the main studio be located within the 70 dBu or 3.16 mV/m contour? [X] 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? [X] 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. E-3

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-4

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-5

(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 3,047 sq. km. Population 243,829

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: _____)

[ ] 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-6	
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-7

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-7

(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-7

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

(b) If the answer to (a) is yes, does the proposed operation satisfy the requirements of 47 C.F.R. Section 73.207? [ ] 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.

(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? [X] 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. E-8

25. Is the proposed station for a channel in the range from Channel 221 to 300 (92.1-107.9 MHz)? [ ] Yes [X] 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 [X] 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
Date July 18, 1990	Telephone No. *(Include Area Code)* (615) 899-9393

Exhibit E-1
Faith Christian Academy
Berne, Indiana
Vertical Plan Sketch

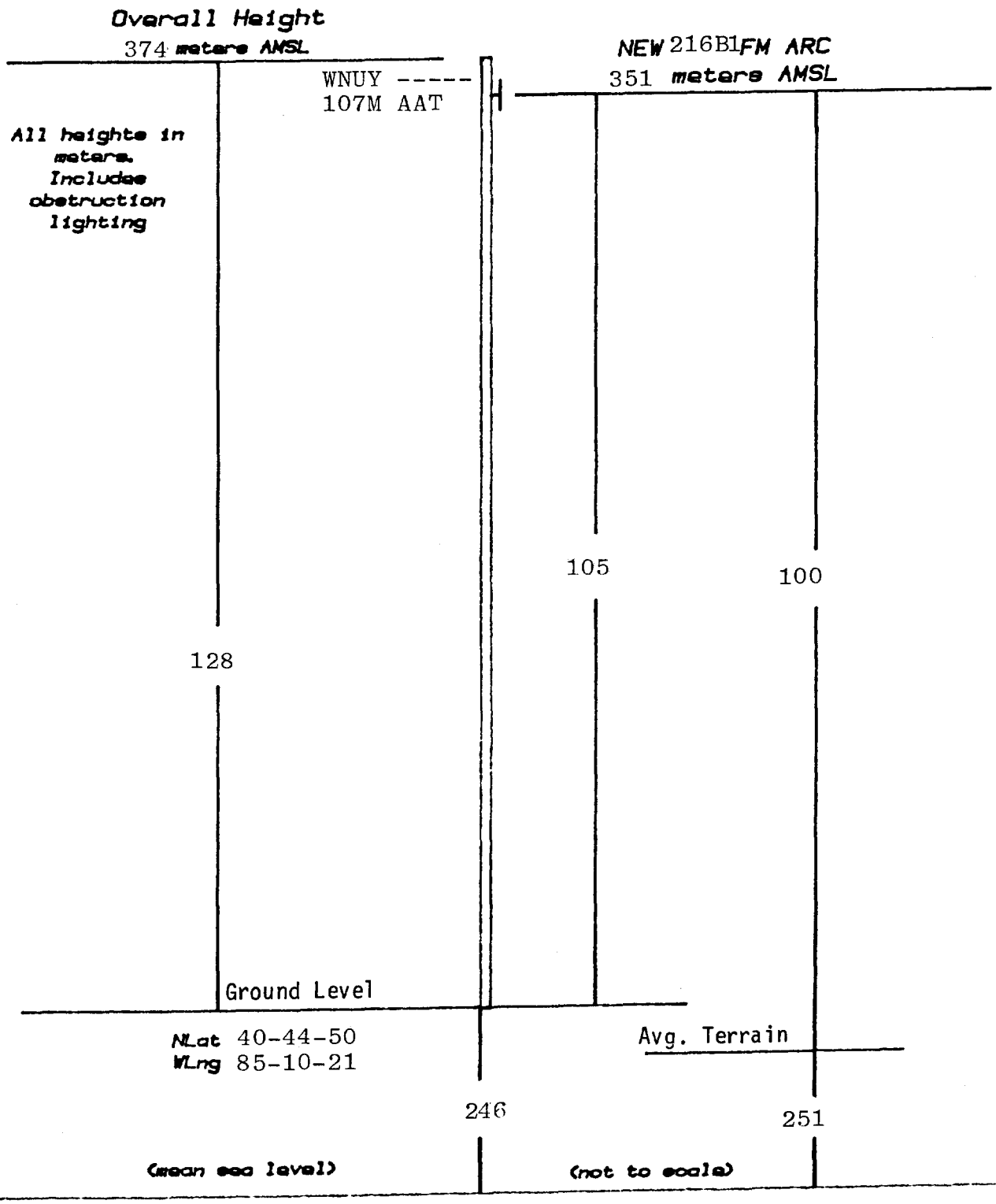


Exhibit E-2
Faith Christian Academy
Berne, Indiana
Statement Regarding Proposed Use Of A Directional Antenna

Shively Laboratories will be asked to furnish a Circularly Polarized Directional FM Antenna designed to meet the requirements of the proposed new non-commercial educational station and conforming to the following specifications.

General Description

The antenna array will consist of three (3) bays using driven dipoles and parasitic beam shaping elements. The amplitude and phase relationship to the driven elements will be fixed at the time of manufacture in order to achieve a directional radiation pattern. These elements will be designed for side mounting on a steel tower. The proposed orientation of the main lobes will be North 70 degrees East and North 170-180 degrees East.

Pattern In Horizontal Plane

The pattern will be experimentally adjusted to comply as closely as possible with Figure 1 which is based on a theoretical pattern. The actual pattern achieved will, of necessity, differ somewhat from Figure 1; however, a special effort will be made to tailor the horizontal and vertical plane radiation patterns to agree, as closely as possible with Figure 1.

The power in the maximum will reach 25.0 kilowatts. The directivity will comply with the FCC requirement that the radiation will not increase more than 2 dB per 10 degrees of azimuth, nor exceed a ratio of 15 dB maximum to minimum.

Method of Achieving the Pattern

A single bay antenna will be set up on a steel pole on an antenna test range. The test pole will be erected vertically on a pedestal turntable to facilitate the taking of measurements. The test antenna bay will be approximately twenty feet above ground. The turntable will be equipped with a motor drive and azimuth indicating servo mechanism, the resolution of this azimuth measuring servo system being approximately one-tenth of a degree.

The antenna under test will be operated in the transmitting mode and fed from a Wavetek Model 3000 Signal Generator which will be set at the frequency of 91.1 mHz. The frequency of this signal generator is constantly monitored by means of a Heathkit Model IM4110 Frequency Meter.

A corner reflector linear polarized broad-band dipole receiving antenna will be located approximately six hundred feet removed from the antenna under test, and mounted at the same height above average terrain as the radiation center of the antenna under test. The dipole receiving antenna will be rotatable in its mount to permit the measurement of the horizontal and vertical polarizations of the antenna under test. The signal received by the dipole will be fed back, via a 50 ohm heliax cable, to a Scientific-Atlanta Series 1710 Portable Microwave Receiver used in conjunction with a Scientific-Atlanta Model 1720 Low Frequency Converter. The relative field strength will be plotted as a function of azimuth on a Scientific-Atlanta Series 1530 Polar Pattern Recorder.

Deicers will not be supplied. Due to the good bandwidth characteristics of the array, typical bandwidth being approximately 5 mHz between 1.5:1 VSWR points, the VSWR during minor icing conditions, should they occur, should not exceed 1.5:1.

Power Input Requirements

The required input power to the antenna will be calculated to achieve a maximum effective radiated power of 25.0 kilowatts circular polarization. The input VSWR is guaranteed not to exceed 1.1:1 at the carrier frequency, plus or minus 150 kilohertz, as measured at the factory.

The Following Measurements Will Be Provided

1. The measured horizontal and vertically polarized horizontal plane radiation pattern of the antenna tuned on a steel tower section having a diameter equivalent to that planned for the station site. These measurements will be made at the factory by rotating the tower section in its vertical axis on the antenna range.

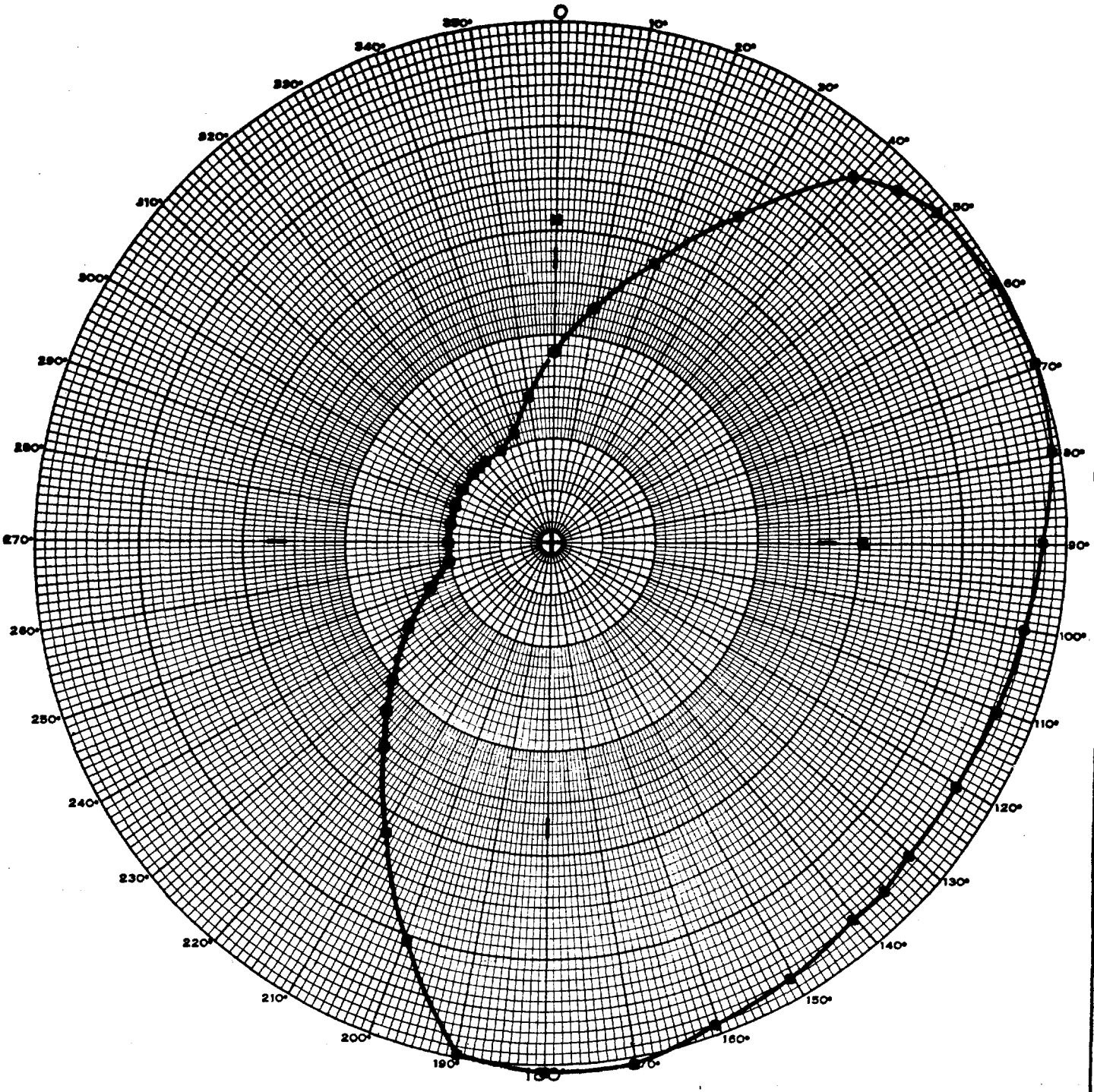
2. The measured input VSWR of the complete antenna as tuned at the factory. These VSWR measurements will be made at the carrier frequency and at up 100 kilohertz intervals to plus and minus 500 kilohertz.

Information Source

The above described method of achieving the desired horizontal and vertical radiation patterns has been taken from manufacturers' literature. The extensive range testing and field tuning are customer options, the cost of which must be borne by the purchaser.

It is the intent of the applicant to request these options to ensure that the actual antenna pattern conforms to that which is proposed herein.

The additional expenses of having the antenna range tested and field tuned have been included in the applicant's estimates of the construction costs of the proposed facility.



Rel. Field: 1 unit = 0.02 field
Antenna Model: Shively Custom

Exhibit E-2 - Figure 1
Faith Christian Academy
Berne, Indiana
Horizontal Antenna Plot