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Exhibit L2.2

RECEIVED BY MA

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100 MAIL BRANCH (717) 787-6883



PCA-2-AWL

PENNSYLVANIA COUNCIL ON THE ARTS
ROOM 216, FINANCE BUILDING
HARRISBURG, PA 17120

GOVERNOR'S OFFICE

JOSEPH P. LUCIA
LEHIGH VLY COM BROADCASTRS

DATE OF MAILING: July 27, 1987

P. O. BOX 1456
ALLENTOWN, PA 18105

RE: Application Number FY87-0361
Grant Amount Requested \$10000.00
Grant Award \$5000.00

Dear JOSEPH P. LUCIA:

I am pleased to inform you that the Pennsylvania Council on the Arts has evaluated your proposal referenced above for \$10000.00, and has awarded a grant in the amount of \$5000.00 in support of the activities described in application number FY87-0361, a summary of which is:

FOR EXPANDED ACTIVITIES OF A COMMUNITY RADIO GROUP, INCLUDING ACQUISITION OF PROGRAMS

The grant is subject to all terms and conditions contained in the application which you signed, a copy of which is enclosed, as well as the following restrictions, conditions and changes:

1. Implementation and completion of the project shall be within the period 9/1/87 to 8/31/88.
2. Invoices must be received by the Council within 90 days of Date of Mailing of this letter.
3. Attached Grantee Integrity Clause is hereby made a part of this contract.

If you have no objection to any of the restrictions, conditions and changes contained in this letter, payment of the grant will be accelerated if you sign the enclosed copy of this letter where indicated and return it, together with the required documents, to the Council as soon as possible.

If you have objections to any of the provisions, you must notify the Council in writing within 30 days from the date of mailing; otherwise, you will be considered to have accepted them as you agreed in the certification to your application.

It is essential that you follow these procedures to receive your grant:

1. Reread all enclosures carefully, including the "Additional Terms and Conditions Governing Grants-in-Aid" and "General Provisions" with which you agreed to comply in your application. These are an integral part of your grant and should be retained in your files.

EXHIBIT 2.2

page 2

FY87-0361

LEHIGH VLY COM BROADCASTS

- 2. Sign and return immediately the appropriate materials in the envelope provided.

On receipt of a signed copy of this letter or when the 30 day period is completed, whichever is earlier, and when we receive your invoices and related documents, we will process them for payment. In approximately eight to ten weeks you will receive a copy of the grant confirmation and all or part of the money granted.

If there is a personnel change, a change in the scope of activities covered by the grant or a change in the way the grant is to be administered, please notify the Council immediately.

The Council's funding comes primarily from the legislature, so it is important that you keep your legislators informed of your activities and invite them to your programs.

If you have any questions about these materials or the grant procedure, please feel free to call our office.

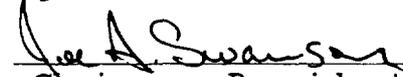
In addition to all the preceding instructions and provisions, the most important message I would like to convey is the gratitude of the Council for your contribution to the life of Pennsylvania.

Sincerely,


 June Batten Arey
 Executive Director

- Enclosures: Application
 Instruction Sheet
 Invoices
 Additional Terms and Conditions
 General Provisions
 Grantee Integrity Clause
 Nondiscrimination Clause
 Financial & Narrative Report Forms
 Envelope addressed to the PCA

We agree to the terms and conditions set forth above.

BY 
 Chairman, President or
 delegated authority


 Project Director

Joe A. Swanson, President
 Typed name and title

Joseph P. Lucia, Grants Director
 Typed name and title

KEEP THIS COPY OF LETTER FOR YOUR FILES

Exhibit L2.2

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SPECIFIC SUPPORT GRANT APPLICATION

870361

Name & Address of Applicant Lehigh Valley Community Broadcasters Association P.O. Box 1456 Allentown, PA 18105 County Lehigh Contact Person Joseph P. Lucia Phone No. B (215) 758-4998 H (215) 691-3548 Fed. I.D. No. 23-235-4475	PCA A
	Your File No.
	Program Applied To Media Arts
	Artistic Director Margaret Myers
	Project Dates From September 1, '87 To August 31, 1988

PROJECT DESCRIPTION (Use this space only)
 The LEHIGH VALLEY COMMUNITY BROADCASTERS ASSOCIATION (LVCBA) requests support to enhance the quality and increase the range of the radio services and opportunities it provides to Allentown, Bethlehem, and surrounding areas. At present, the organization's approximately 120 members, who come from a mix of ethnic and social backgrounds reflecting the diversity of the Lehigh Valley, present, via WLUH-FM, over 5,000 broadcast hours per year of programming that includes locally-recorded live concerts by regionally- and nationally-recognized performers; interviews with artists, writers, film-makers, musicians, playwrights, photographers, and other creative types from the region and beyond; locally-produced news and public affairs shows; independently-produced programs and works by talented media and tape artists from around the country; radio drama, poetry and fiction readings, and other "spoken word" presentations; as well as an enormous range of carefully-selected music not heard on commercial, or even public, radio, notably an eclectic mix of jazz, folk, Celtic, alternative rock, blues, bluegrass, classical, and electronic material programmed in assigned time slots for listeners who want to hear a particular style on a regular basis. Specific activities to which funds would be applied for achievement of the organization's goals include: 1) leasing of facilities and equipment for a broadcast-quality production room and an administrative office in order that the LVCBA may centralize and make optimal use of the creative and managerial skills of its members; 2) recording and coverage of significant local musical events, including shows at Godfrey Daniels Coffee House and Musikfest, and concerts by the PA Symphonia, Improvco, and various independent artists; 3) recording and coverage of local theatre events, especially those at PA Stage; 4) improvement of on-air, production, and media management skills through subsidized attendance at seminars and conferences (e.g. the NFCB meeting), paid presentations by radio professionals at LVCBA general meetings, and an increased budget for training members by skilled producers from the region; 5) presentation and recording of a series of "local artists" concerts in conjunction with LVCBA fundraising efforts; 6) improvement of the LVCBA's publicity and public relations program, including a higher-quality program guide, an ad campaign, and a promotional brochure to attract supporters and new members; and 7) acquisition and regular broadcasting of syndicated programs by independent producers, using the NFCB as a major source.

CERTIFICATION AND STATEMENT OF ASSURANCES

The applicant certifies, represents and warrants to the Council that:

- The information contained herein and in all attachments and supporting material is true and correct, and the filing of the application has been duly authorized by the governing body of the applicant.
- The applicant accepts in advance any grant awarded by the Council, agreeing:
 - That any funds received as a result of the application will be expended solely for the described projects and programs, in accordance with the provisions of the Guide to Programs and Services entitled "Additional Terms and Conditions Governing Grants-in-Aid" and "General Provisions."
 - To such other restrictions, conditions, and changes as the Council may impose, unless the applicant objects within 30 days of mailing of the award letter setting forth the terms of the grant in writing.
- Any organization that the applicant assists will also comply with the provisions of the "Additional Terms and Conditions Governing Grants-in-Aid" and "General Provisions," when conducting any activity for which the applicant receives financial assistance from the Council.

By: Joseph A. Swanson 3/27/87 Joseph P. Lucia 3/27/87
 Chairman, president, or board member Date Project Director Date
Joseph Swanson, President Joseph P. Lucia, Grants Director
 Typed Name and Title Typed Name and Title

Applicant Lehigh Valley Community Broadcasters Association	Your File No. F787-0361	PCA Use 870361
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PROJECT BUDGET

INCOME

A. Cash (detail all major sources)

Membership fees (renewals and new memberships)	:	\$ 2,660.00
Fundraising (benefit concerts, record hops, t-shirt sales, etc.)	:	\$ 3,370.00
Program Guide advertising revenues	:	\$ 1,120.00
Underwriting of specific programs by corporate sponsors	:	\$ 5,930.00
Individual donations	:	\$ 530.00
Corporate grants	:	\$ 450.00

A. Applicant Cash Revenue \$ 14,060.00

B. Amount Requested from PCA \$ 10,000.00

C. Total Cash Revenue \$ 24,060.00

D. In-kind (detail all major sources)*

5,000 broadcast hours per year, @ \$3.00 per hour (28 weeks full-time 24 hrs/day; 24 weeks part-time, 5 hrs/day)	:	\$ 15,000.00
400 hours of broadcast related production, @ \$5.00 per hour	:	\$ 2,000.00
		D. Total In-Kind Contributions \$ <u>17,000.00</u>

*In-kind labor provided by LVCBA members is valued at well below market cost. In addition, administrative, fund-raising, and other support services, which amount to thousands of person-hours per year, are excluded from the estimates presented.

E. Total Project Income \$ 41,060.00

EXPENSES

F. List cash expenses by category. Identify individually, salaries, wages, and fees paid to artists, agents, and consultants.

Rental of a 2-to-3 room facility to house a production room and administrative center, \$400.00/month, incl. utilities	:	\$ 4,800.00
First year of a 3-year major production equipment lease, \$3,300.00/year, plus \$450.00 in supply (tapes, etc.) costs	:	\$ 3,750.00
Recording, production, and other expenses for live concert series, including honoraria to all artists involved--6 rock events @ \$250.00 each (\$1500.00); 6 folk events @ \$300.00 each (\$1800); 4 classical events @ \$325.00 each (\$1300); 4 "live studio" events @ \$300.00 each (\$1200); Musikfest news/public affairs/music coverage, @ \$1000.00; and 2 Improvco jazz events @ \$400.00 (\$800):	:	\$ 7,600.00
Recording, production, and honoraria expenses for local theatre series:	:	\$ 1,000.00
Publications and publicity costs, including production costs for higher-quality Program Guide (\$2200.00), production of a promotional brochure (\$1000.00), and a local advertising campaign (\$400):	:	\$ 3,600.00
Training expenses, including 5 speakers @ \$50.00 each (\$250.00), NFCB registration fees (\$ 750), and trainers' overhead and fees (approximately 2 sessions/month, \$1000/year)	:	\$ 2,000.00
Program acquisition for syndicated material purchased from independent producers and other sources	:	\$ 1,310.00

The revisions on this page have been submitted by the applicant.

Signature: Joseph P. Juez Date: 5/12/87
 Signature: Paul A. Swanson Date: 5/14/87

F. Total Cash Expenses \$ 24,060.00

G. Total In-kind Expenses \$ 17,000.00
(enter total of D above)

H. Total Project Expenses \$ 41,060.00
(must equal E above)



1988 PROGRAMMING HIGHLIGHTS

The following programs and series represent a partial listing of the highlights of the more than 5,000 hours of programming presented by the LVCBA on WMUH-FM, Muhlenberg College. Partial funding for these efforts was provided by the Pennsylvania Council on the Arts.

Valley Vivaldi Series, Pennsylvania Sinfonia

Three Summer Concerts

Lehigh Valley Live Radio Concerts

Alan Gaumer Group, Jazz

Tom Harrell and Bill Goodwin, Jazz

Mike Dugan Blues Band

Bobby Rouch, Jazz

Newport Festival Jazz All-Stars

Family of Strangers, Rock

Summer Classical Series

Les Papillons, Vocalist & Piano

Hadyn Trio, Two Violins & Piano

Trio Doppler, Two Flutes & Piano

Sunday Recital Hall Series

Muhlenberg & Moravian College Recitals

Live On-Air Performances

MacKay (Scottish) Pipe Band

James Farley, Electronic Music

Gary Hassay, Improvisational Music

League of Crafty Guitarists, New York Chapter, Acoustic

Han Theessink, Dutch Blues Singer-Songwriter

Radio Dramas, Produced by the LVCBA

Theatre Outlet:

The Bear, Anton Chekov

The Vegetable, F. Scott Fitzgerald

The Root of Chaos, Douglas Soderberg

Uncle Frank's Home, Children's Program, Brown Hall Productions:

The Tiger and the Brahman

Three Little Wolves

The Country Mouse and City Mouse

The Crowded House

The Clown Who Forgot How to Laugh

The King's Bean Soup

Live & Recorded Interviews

David Amram, International Music Ambassador

Rory Block, Blues Singer, Rounder Records

Anne Hills, Folk Singer, Flying Fish Records

Sally Rogers, Folk Singer, Flying Fish Records

Washington Squares, Folk Group

Harry Thompson, New Age Composer

Lynne Weldon, Filmmaker

Director of Allentown's Mayfair

Syndicated Half-Hour Arts Programs

Totally Wired, Modern Music with Artist Profiles

Performing Arts Profile

The Mind's Eye, Radio Dramatizations

Lonesome Pine Special, Folk Music Concerts

Jazz Revisited, Golden Age of Jazz

Word Jazz, Ken Nordine Sound Collages

Additional Highlights Produced by LVCBA

Jobs In America, Joe Swanson, Mid-West Radio Theatre Workshop Award

Home Taper, Tapes Submitted by Listeners, Local & International

Art News, Half-Hour Local Arts Report



LEHIGH VALLEY COMMUNITY
BROADCASTERS ASSOCIATION

TRAINING MANUAL

WMMUH
Allentown **91.7** FM

LEHIGH VALLEY COMMUNITY
BROADCASTERS ASSOCIATION

TRAINING MANUAL

Written & Edited By:

Geoffrey H. Chambers

Joe A. Swanson

Published June, 1988, by LVCBA, P.O. Box 1456, Allentown, PA 18105

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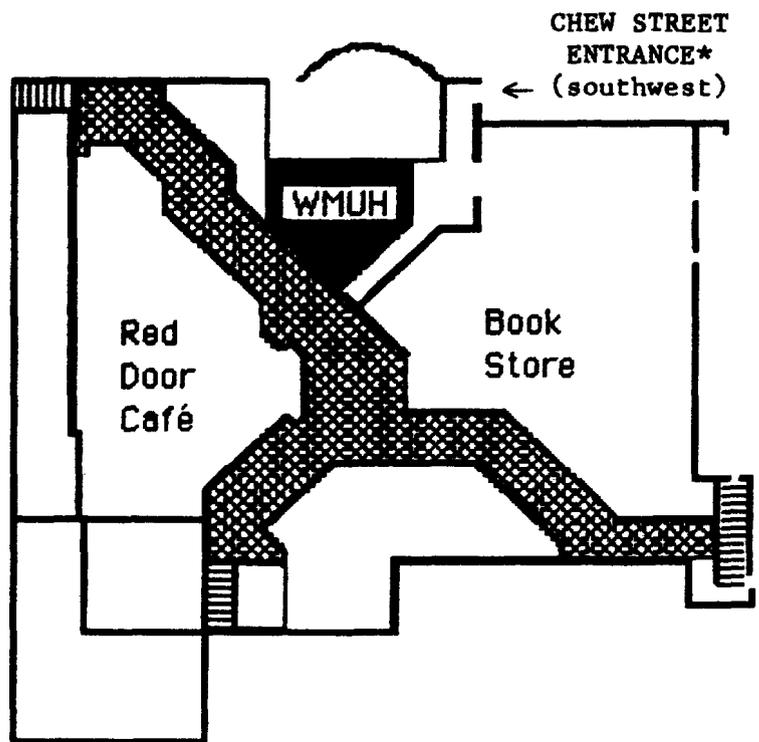
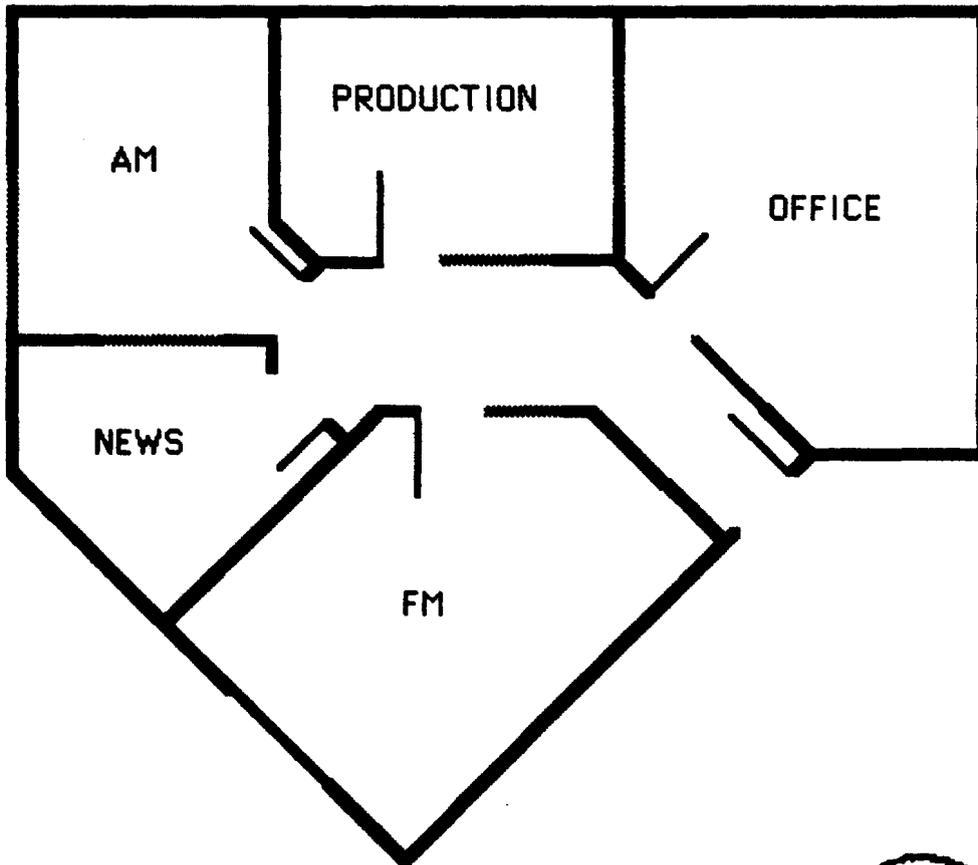
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WMUH STUDIOS



* Outside Entrance

Push black button by door to activate Studio Light.

SEEGER'S UNION LOWER LEVEL

WMUH FACTS

CALL LETTERS WMUH-FM

LICENSEE Muhlenberg College

FREQUENCY 91.7 MHz

POWER 440 watts

STUDIO SITE Seeger's Union, 2400 Chew Street, Allentown

ON-AIR HOURS 24 hours a day, year-round

STAFF General Manager, Student Staff and LVCBA Members

TELEPHONES Studio: (215) 433-5957 Office: (215) 821-3239

LVCBA FACTS

FOUNDED 1984, as a non-profit corporation

MEMBERSHIP More than 150 paid volunteer members, most of whom serve as
community programmers on WMUH

AFFILIATION Associate Member, National Federation of Community Broadcasters

SCHEDULE LVCBA produces programming on WMUH during college vacations:

Summer	Mid-May through early September
Fall	Early October
Thanksgiving	Late November
Christmas	Mid-December through mid-January
Easter	Late March-early April
Spring	Late April

The association also produces the station's early morning
and weekend ethnic programs

FUNDING Membership dues, program underwriting, grants, listener
contributions, concerts, sales, and general fundraising

PUBLICATIONS Monthly Newsletter ("Airwaves") and Summer Program Guide

OFFICE 4th Floor, Masonic Temple, 1524 Linden St., Allentown, PA 18102

TELEPHONE (215) 821-9188

MAIL ADDRESS LVCBA, P.O. Box 1456, Allentown, PA 18105

LVCBA HISTORY

Community radio traces its beginnings to the 1940's when federal communications regulations set aside the lower part of the FM band for educational public broadcasting. The growth of FM radio in the late 1950's and early 1960's led to the establishment of numerous public, college, and community stations nationwide, including several college-based facilities in the Lehigh Valley. By the end of the 1970's, however, these local stations were still almost exclusively student-run operations that broadcast only while the colleges were in session. Even today, the Lehigh Valley remains one of the few major markets in the country without its own full-time community station or National Public Radio affiliate.

In 1980 several students at Muhlenberg College invited community members to participate in programming on the college's station, WMUH, 91.7 FM. With the permission of the college administration, the community staff worked with the students in keeping the radio station on the air during that summer's vacation break. The community staff was then given permission to produce programs during all college vacations as well as during the early morning hours year-round, keeping the station on the air full-time.

Initially, the operations at WMUH involved only a handful of volunteers. But as the community staff grew, it became apparent a more formal organization was needed to coordinate the station's volunteer programmers. In 1984 the Lehigh Valley Community Broadcasters Association (LVCBA) was formed as a non-profit corporation, and a year later the association became a member of the National Federation of Community Broadcasters, an organization representing community radio operations nationwide.

Today, working with a staff of more than 130 members, the LVCBA produces 6,000 hours of programming on WMUH annually. These volunteers also contribute at least twice that many hours to train new programmers, raise funds, and carry out various administrative activities. In 1987 the LVCBA established its own office and production facility at Allentown's Masonic Temple, where members receive training and produce programs for on-air use. Besides its broadcast functions, the association also sponsors concerts, provides recorded music for community events, underwrites performances by visiting artists, and supplies programmers to other college stations. These efforts are aimed exploring the possibilities of broadcast media by providing public access to the airwaves and promoting a wider appreciation for the performing and audio arts.

PHILOSOPHY AND PURPOSES

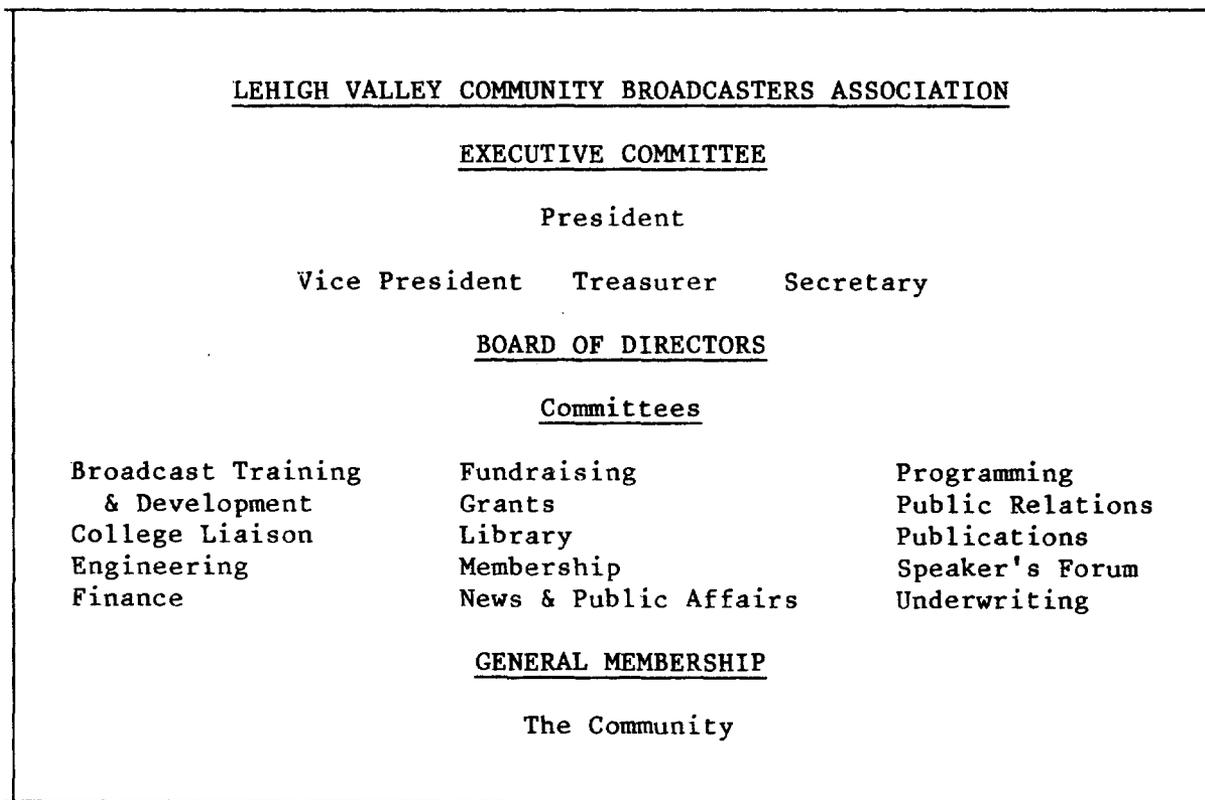
The LVCBA was formed on the principle of "many voices with many things to say." From that concept stem the following purposes:

1. To promote community access and involvement in broadcast media.
2. To train community members in broadcast operations and techniques.
3. To encourage the broadcast of material not otherwise available.

4. To provide a forum for works by local musicians, poets, writers, and other artists.
5. To establish and operate a communication center for the community.

ORGANIZATIONAL STRUCTURE

The LVCBA is governed by a Board of Directors elected by the association's General Membership. The Board selects its own officers and appoints committees to plan and conduct the association's activities. The committees are headed by Board members who recruit volunteers from the membership and the community. The following chart outlines the association's organizational structure:



MEMBERSHIP REQUIREMENTS

There are three classifications of membership in the association:

Regular Membership Anyone twelve years of age or older can become a regular member by completing an application form and paying annual dues of \$15. Members have up to six months after their annual expiration dates to re-new their memberships but are required to keep their dues current within two months following expiration if they wish to maintain their broadcast privileges.

Supporting Membership Any person or community organization can become a supporting member of the LVCBA by making an annual contribution. Supporting members receive the association's newsletter and may attend general meetings, although they do not have voting or broadcast privileges.

Honorary Membership Honorary membership is granted by the Board of Directors to people who have contributed significant service to the association. Honorary members, who are not required to pay membership dues, have the same privileges as regular members, except for voting powers.

MEETINGS

The association's General Membership, Executive Committee, and Board of Directors meet each month, while the Board's committees hold meetings as required by their individual workloads. Special meetings of these groups may be called at any time to act on emergency measures.

Monthly Meeting Schedule

General Meeting	1st Monday	8 p.m.	Godfrey Daniels, Bethlehem
Executive Committee	2nd Monday	8 p.m.	Various locations
Board of Directors	3rd Monday	8 p.m.	Various locations

ELECTIONS

The annual meeting of the corporation is held the first Monday of December in lieu of the regular membership meeting. During this meeting, members elect a slate of candidates to replace directors whose terms have expired. Immediately after the election, the Board holds its annual reorganization meeting to install new directors and elect officers for the coming year.

FUNDING & BUDGET

The LVCBA qualifies under state and federal tax laws as a 501(c3) non-profit organization. The association receives funding from numerous sources: program underwriting contributions, public and private grants, general donations, membership dues, benefit concerts, and "premium" sales. Although none of our officers or directors receive payment for their services, the organization's non-profit status does not preclude the possibility of hiring a staff to administer and supplement the support functions performed by volunteer members.

The Board of Directors is responsible for planning and administering the association's annual budget. After the budget is approved, the association's Treasurer maintains an account of all income and expenditures, issuing monthly reports to the Board and General Membership. The association also maintains bank accounts and investment funds to provide for special purchases and to meet the organization's long-term goals.

WMUH-FM

WMUH, Allentown, is a Class D, non-commercial, educational radio station licensed by the Federal Communications Commission to broadcast on channel 219 at 91.7 megahertz. Muhlenberg College, the station's licensee, started WMUH in February, 1966, after operating a closed circuit (carrier-current) AM station on campus for several years. When WMUH first went on the air, the station operated with a broadcasting power of 10 watts. In 1979 the college received authorization for a power increase to 440 watts, extending the station's primary reception area to a 35-mile radius of the campus in west Allentown.

WMUH's coverage area includes four cities, Allentown, Bethlehem, Easton, and Phillipsburg, a metropolitan area with a population of 650,000. In addition, the station is carried by FM cable services in communities outside this area, boosting the potential audience to one-million listeners.

Student Staff

WMUH's student operations are governed by a Board of Directors. The Board is appointed by three officers---Station Manager, Program Director, and Business Manager---who are elected by the student staff. Directors oversee individual areas of the station's operations, including programming and staff coordination. As one of the resources of the college's student activities program, WMUH is overseen by the Dean of Student Affairs, who is responsible for appointing a General Manager to represent Muhlenberg College, the licensee. The General Manager directs the station's day-to-day activities and proposes long-term goals and programs for approval by the college administration.

All matriculating students (degree candidates) are eligible to serve on the staff with the approval of the Student Board. Students receive training similar to that offered by the LVCBA and are responsible for developing programming for periods when the college is in session. The station's studios also serve as a training lab for students enrolled in communications courses and includes facilities for WMUH-AM, a carrier current station used to train programmers for broadcasting on the college's FM frequency.

Station Funding

WMUH is funded through Muhlenberg College, the college's Student Activities Committee, and general fundraising, such as program underwriting, premium sales (t-shirts, buttons, etc.), and benefit concerts. The station also seeks grants from foundations, government organizations, and other public and private funding sources. These funds pay for equipment, special productions, engineering services, publications, and other station operations. An annual budget covering these revenues and expenditures is prepared by the General Manager for review by the station's Board and approval by the college's Board of Trustees.

PROGRAMMING

Commercial Broadcasting

During the early days of broadcasting, a debate emerged over whether paid commercial announcements should be allowed on the radio. The issue pitted the financial desires of station owners against the fear that commercialization would destroy the medium's potential as a source of information and cultural enrichment. Herbert Hoover, as Secretary of Commerce in 1922, summed up the sentiments against radio advertising, declaring it "inconceivable that we should allow so great a possibility for service to be drowned in advertising chatter."

The advocates of commercial broadcasting won out, although history has confirmed the fears of their opponents. Today, most radio programming is decided on the basis of record sales charts and listener surveys. At work is "the lowest common denominator" principle, which holds that the way to build the largest audience possible is to offend the least number of listeners.

Community Radio

Community radio stations like WMUH developed as an alternative to commercial broadcasting. Instead of profits, the emphasis of community radio is on quality---on the artistic interest and importance of the material. One of the greatest faults of commercial radio is that stations play such an infinitesimal selection of music compared to what is available. Many important artists are ignored simply because they may not be familiar enough. And many viewpoints and tastes are never exposed at all, because the potential audiences are considered too small to be worth the bother.

By contrast, community stations like WMUH focus on material that receives little if any airplay on commercial radio. Should programmers choose to play a more popular artist or album, they are expected to feature a piece that is not widely known, as opposed to playing a "hit" or "standard" selection. Not that there is anything wrong with material that is popular; on the contrary, most forms of music could not survive without a following. The point is, why play the same selections over and over when there is an immense body of work that is every bit as interesting and appealing as material that is commercially successful.

The Audience

With few exceptions, our listeners have no alternative other than WMUH for receiving the type of the music, arts, and local public affairs programming we carry. This is by design: We decide to produce specific programs because it is obvious to us there are audiences "out there" not being served.

On the basis of responses from listeners, WMUH's audience is estimated at less than 1,000 people during off-peak hours to upwards of 10,000 for "prime time" programs. Even more important to us is the size of the cumulative audience, the total number of people who listen to the station with some regularity. Although the station may draw less listeners per hour than the most popular commercial

stations, WMUH features a much wider variety of programs and thus appeals to many audiences--people of all ages and backgrounds.

Because of the selectivity of our programming, we believe that people are equally selective in choosing to listen to us. This realization is important in determining the directions of our programming and also helps set the tone for how we talk to our audiences. No matter how many people may be tuned to a particular program, our announcers talk to them as individuals, as if each of them was their only listener.

Block Formatting

A technique for learning how to announce is to pretend that you are speaking to one listener. But if you really wanted to talk to one person, it would be more efficient to use the telephone. Instead, our intent is to attract a realistic percentage of the potential audience without diminishing our quality. On one hand, we aren't trying to appeal to the lowest common denominator. On the other, we don't want to be competing with the telephone company.

In an attempt to increase listenership without affecting quality, we have adopted what is known as a "block" format for our weekday programming. In this type of format, programs are scheduled in the same time slots each day and are grouped to allow a smooth transition from one program to the next. This makes it easier for listeners to know when programs are scheduled and also assures audience retention whenever a new program begins.

Generally, our weekday programs cover basic categories such as Classical Music, Folk Music, Alternative Rock, Jazz, and Public Affairs & News Programming. Weekend programs focus on more specialized material, including ethnic music (Hispanic, Indian, Western European-Alpine, Gospel, Reggae, and Third World), audio arts (Drama, Poetry, and Experimental), and musical sub-categories (Blues, Roots Rock, Oldies, and Avant Garde). The emphasis in all cases is to provide a forum for music and viewpoints that are unavailable elsewhere.

LVCBA Broadcast Periods

The LVCBA produces programming on WMUH during college vacations and the examination periods at the end of each semester. The dates for these breaks vary from year to year, but essentially our broadcast calendar is as follows:

Summer	18 weeks	Mid-May through early September
Fall	1 week	Early October
Thanksgiving	1 week	Late November
Christmas	5 weeks	Mid-December through mid-January
Easter	2 weeks	Late March-early April
Spring	1 week	Late April

We also produce all of WMUH's overnight programs, as well as the ethnic programs featured every Saturday and Sunday morning of the year.

Training

Broadcasting is a craft as well as an art form. It therefore takes many years of experience to master. But at the simplest level, almost anyone with basic communication skills and a basic aptitude for operating equipment can produce their own programs.

To qualify for airtime, our programmers are required to hold an FCC third class radiotelephone operator's license (see "Federal Communications Commission" section) and also must complete several stages of training. The first of these is group training, which covers LVCBA and college policies, FCC regulations, equipment operations and broadcast techniques. Prospective programmers then participate in one-on-one training, sitting in with an experienced operator during an actual broadcast.

Once a member has learned the required procedures and operations, he or she may be scheduled for airtime by the coordinators of our individual program categories. To help members continue improving their skills, the LVCBA also offers various forms of advanced training, including speakers at general meetings, radio production workshops, and training aids such as printed materials and instructional tapes.

Our Role as Community Broadcasters

In the scramble for readers, listeners, and viewers, mass media are becoming indistinguishable in regards to the subjects they cover and the viewpoints they present. What we are experiencing as a result is the homogenization of our culture, the reduction of values and lifestyles to but a few acceptable alternatives. Marshall McLuhan's prediction that the pervasiveness of mass media would create a "global village" has come to pass. Unfortunately, our world has become more a global shopping mall than the colorful village of old.

As we see it, our role as community broadcasters is to explore and expand the possibilities of mass communication, a responsibility that extends well beyond simply providing entertainment. In a very broad sense, we see ourselves as educators and propagandists, though not of any particular cultural discipline or political belief but as proponents of mankind's creative potential and of everyone's right to choose.

WMUH STUDIOS & EQUIPMENT

FM STUDIO

The FM Studio can be considered the brain of the radio station complex, for it is from here that all on-air broadcasts are originated and controlled. The peripheral equipment in the studio---CD players, tape decks, turntables, and other audio equipment---may change from time to time, but the control board and most other operations will virtually always remain the same.

CONTROL BOARD

The FM Control Board, an LPB Signature Model III, is capable of mixing eight different sources under each of its three channels (A, B, and C). A-Channel handles most broadcast operations, while B and C are used for remote broadcasts, sports line feeds, and other auxiliary operations.

Pots & Inputs

The volume for each of the board's eight inputs is controlled by a potentiometer, more commonly referred to as a "pot." Following are the pots and inputs for A-Channel:

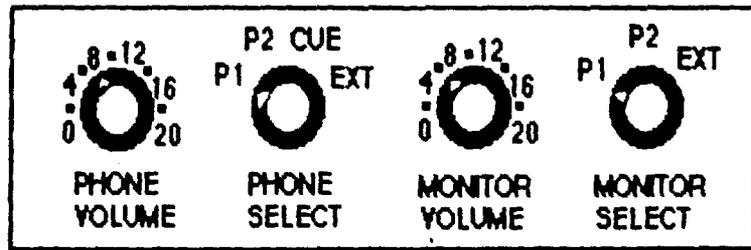
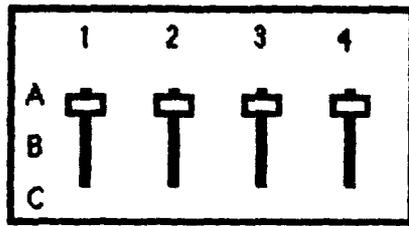
<u>Pot</u>	<u>A-Channel Input</u>
1.	Announcer Microphone
2.	News Room
3.	Left Turntable
4.	Right Turntable
5.	Cart Machine
6.	Cassette Tape Player
7.	Compact Disc Player (ADC)
8.	Compact Disc Player (Denon)

Each pot has a volume level of 0-10. Just below 0 (not numbered) is Cue, a setting for previewing or cueing a source without broadcasting it. See "Cueing an Album" under "Library & Albums" for instructions on setting up a source.

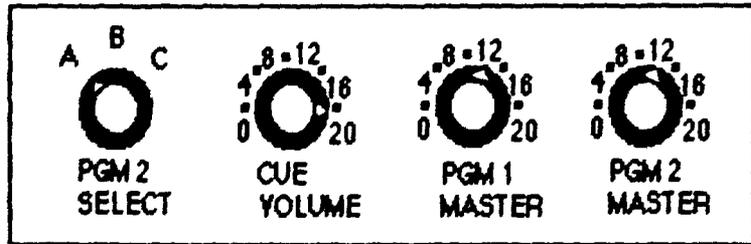
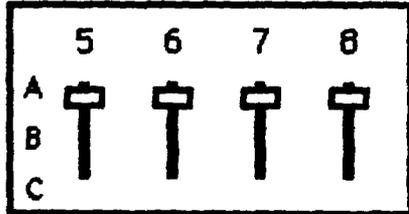
Program Switches

Above each pot is a switch labeled P-1 and P-2 (Program-1 and Program-2):

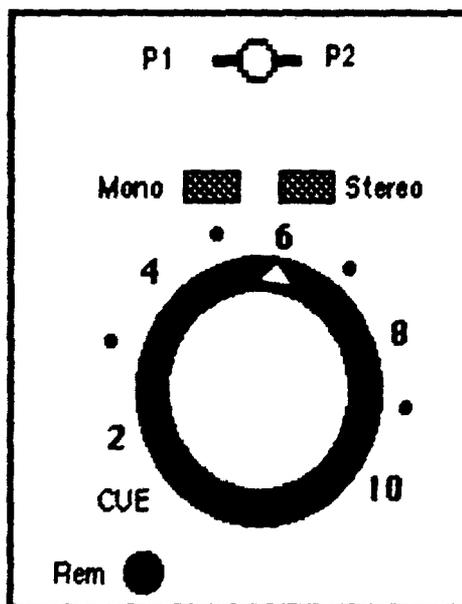
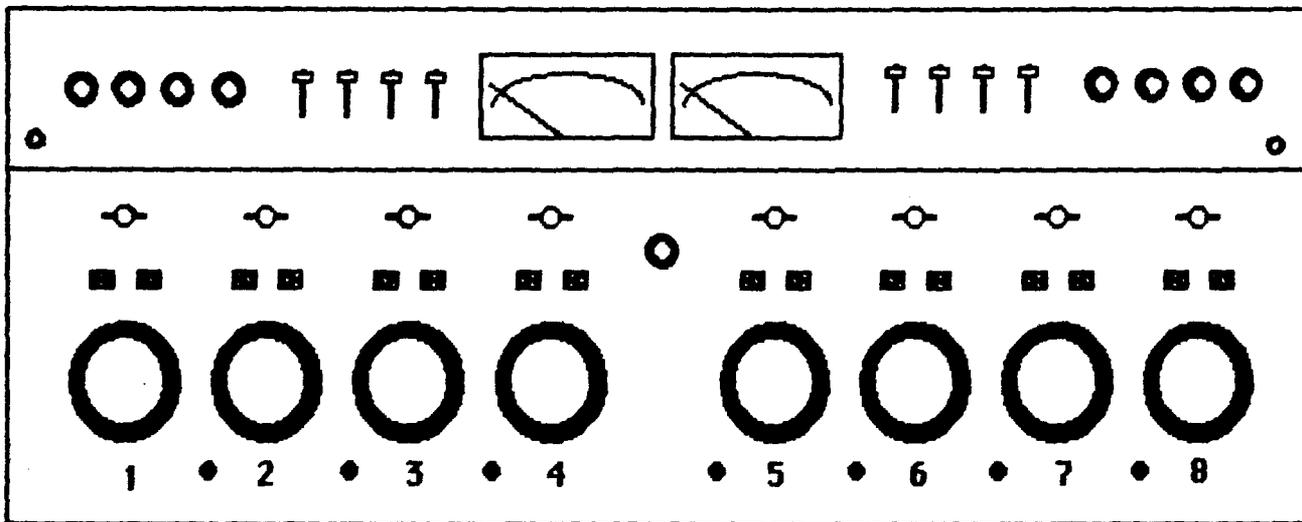
1. P-1, the position to the left, is the program setting for broadcasting. A source in P-1 will be transmitted over the air unless the pot is turned all the way down or is in Cue.
2. P-2, to the right, is an audition channel and cannot be used for broadcasting. See "Cueing an Album" for instructions on using P-2.



Top Left



Top Right



3. The middle selection, not marked, is equivalent to an off switch. Generally, the microphone is the only source that needs to be turned off. Other sources can be left in P-1 when not in use, as long as the volume control is turned down all the way.

Remote Start Buttons

Below each pot to the left is a black Remote Start Button labeled "Rem." Not all of the Start Buttons are operational because most of the equipment is within easy reach. However, the Cassette and Reel-to-Reel Decks located in the rack to the right of the Control Board can be started with the button under Pot 6, depending on the channel in use (A for Cassette and B for Reel-to-Reel). Eventually, additional buttons will be hooked up, allowing easy starts and stops for turntables and other equipment.

Monitor and Phone Controls

In order to hear the material over the headphones or speakers, the Phone Select and Monitor Select controls must be set to the Program desired. The controls for setting the mode and volume for the phones and monitors (speakers) are located on the top left of the Control Board:

1. Phone Volume sets the headphone sound level. To protect your hearing, check this volume control before putting on the headset.
2. Phone Select sets the headphone for P-1, P-2, Cue, or External. The External selection allows the operator to listen to the signal being received from the transmitting tower. When the selector is set in P-1 or P-2, the operator hears the signal before it goes out over the air.
3. Monitor Volume controls the sound level for the studio speakers.
4. Monitor Select sets the speakers for P-1, P-2 or External (see above).

Headphone Jacks

Jacks for plugging in the headphones are located on both the far left and far right of the Control Board just above the center. Generally, the headphone jack on the left should be used, although both are operational.

Program, Cue and Master Controls

There are also four control knobs on the upper right of the board:

1. Program 1 Master, to the far right, is set by the station engineer and is not to be adjusted by anyone else---ever! This controls the board's output and is set at a level consistent with our transmitting equipment.

2. Program 2 Master, which controls the output of material played in P-2, may be adjusted since it does not affect broadcast operations. By turning this setting up, less volume is required from inputs set in P-2.
3. Program 2 Select sets the channel for board inputs in P-2. Although this selector is not used for broadcasting, it should usually be kept in the A-Channel position.
4. Cue Volume sets the sound level for the cue speaker, located in the back of the Control Board.

Channel Selectors

Above each pot's P-1 and P-2 switches are channel selectors marked A, B and C. Most broadcast functions run through the A-Channel, although there are some exceptions:

<u>Pot</u>	<u>Channel</u>	<u>Source</u>
2	B	Emergency Broadcast Tone
6	B	Reel-to-Reel Deck
6	C	Red Door Cafe
8	B	Stadium Events
8	C	Away Games

Additional B and C-Channel inputs will be added for controlling other equipment, as well as for broadcasting from other locations, such as the Production Room, Chapel and Center for the Arts. After using B or C Channels, be sure to return Selectors to A-Channel.

A patch panel is located in the remote transmitter rack in the FM Studio for additional remote inputs. Only the Station Engineer and authorized operators are permitted to set up the patch panel for special remote broadcasts.

VU Meters

In the top center of the Control Board are two VU Meters (Left and Right Channels), which measure the strength of the stereo signal from the sources being used. For optimum sound quality, the meters should always read in the area just below the 0 dB reference level, between 80 and 100%. Readings in the red area above this point should be avoided as much as possible, allowing only the highest peaks of intensity to cause the needles to strike it.

Although the station has compressors and limiters to control the signal sent to the transmitter, there is no way to compensate for the loss in quality when signal readings are below 80% or above 100% ("red-lining"). If the levels run under 80, the processing equipment boosts the signal to the proper transmitting level but also amplifies hum and hiss from the board's system. Similarly, when the VU Meters register over 100, the processing equipment compresses the volume but does not filter distortion caused by over-modulating. Worst of all, the processing equipment cannot always be relied on. This makes it doubly important

for operators to keep signal levels within the recommended range and to take the required transmitter readings every two hours to make sure the processing equipment is operating properly (see "Transmitter Logs" in Appendix).

VU Meter Selector

Beneath the VU Meters is a selector to set the source to be read by the meters: P-1 for on-air, P-2 for audition, Mono for monaural, or Auxiliary for optional inputs. The meter control should be kept in P-1. Keeping selectors in their "home" positions (A and P-1) provides consistency in operations, preventing foul-ups from occurring when other operators take over.

TURNTABLES

The FM Control Room is equipped with Technics Model 1200 Mark II turntables, widely used in the broadcast industry because of their quick start times and general durability. All turntable functions (on-off, stop-start, 33 and 45 rpm speeds, etc.) are labeled and may be adjusted by the operator. The main exceptions are the tonearm weights and anti-skating controls, which are set to specifications by the Station Engineer. If a record skips because it is scratched or warped, do not adjust the weights and do not attempt to play the record---you might damage the cartridge, the stylus, or the tonearm.

Tempo Control

Each turntable is equipped with a tempo control, located to the right of the tonearm. This control allows the operator to adjust the speed of the material being played, a useful feature for mixing recorded material with different rhythms. Except when mixing or intentionally distorting material, the tempo control should always be in the center position (next to green indicator light).

Strobe

The strobe light on the front left of the turntable allows the operator to determine whether the turntable is operating properly. There are two readings possible: one for checking the turntable's speed (whether 33 or 45 rpm) and another for checking the balance (relevant only to the Station Engineer).

1. If the turntable is running at the proper speed, the largest row of dots on the section of the platter hit by the strobe light should appear to be standing still. If the dots are moving forward or backward, then either the tempo control is not centered or something is wrong with the turntable.
2. The tempo control can be used for mixing records with different tempos or to adjust a turntable that is running off-speed. However, if the speed is constantly changing, then you may have to avoid using the turntable altogether, depending on the degree of fluctuation. In either case, be sure to report the problem immediately (see sign posted in studio for the telephone numbers of people authorized to handle equipment maintenance).

Stylus

The cartridge and stylus (needle) for each turntable are replaced periodically and will function properly if the albums are kept clean and the equipment is handled with care. At the tip of the stylus is a small diamond that reads the record grooves, picking up vibrations which are then translated into electronic signals. Dust, dirt and grease on the diamond will reduce the quality of the turntable's output. Just as you should never blow into a microphone to test it, you should never run your finger over a stylus to clean off dust. A special bristle brush for cleaning the stylus is kept near the turntables. If you notice unusual tonearm skipping or sound distortion with albums that play properly on the other turntable, the stylus could be worn out, although there also could be something wrong with the tonearm weight. In any case, report the problem immediately.

CART MACHINE

The studio's cart machine is equipped with the basic features of other tape players. Carts should be ready for airplay without cueing, although it is a good practice to preview a cart in case a previous operator stopped it before it re-cued. You also may want to preview carts that have more than one selection.

Cueing & Playing a Selection

1. Slide the cart into the machine carefully (open end facing inward) until it clicks securely into position.
2. Select Cue on the volume control for Pot-5 with the pot in P-1. Then press the Start button. You will be able to hear the cart over the cue speaker in the back of the Control Board (a source in Cue will not be broadcast).
3. If the selection is running properly, either allow it to play through or Fast Forward the tape to the beginning. In both cases, the tape will stop automatically at the start position, indicated by the red flashing light.
4. If there is more than one selection on a cart, you will have to use Fast Forward to cruise through each of the other selections to return to the start position of the recording desired.
5. After a cart has played, do not use the Stop button. Instead, allow the tape to play through to the stop position set by an electronic cue tone on the tape. That way the tape will be re-cued for the next operator.
6. Also, be sure to note your use of cart announcements in the Program Log as labeled on the cart: PSA, Promo, etc. (see Program Logs in Appendix).

As with albums, it is better to pot up material after pressing the Start button for on-air play, because of recording level differences. Always keep sound levels consistent when switching from source to source---between 80 and 100 on the VU Meters. Sometimes the recommended playback level is marked on the cart, along with other information such as content, time, and outcue (the last few words of the announcement).

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