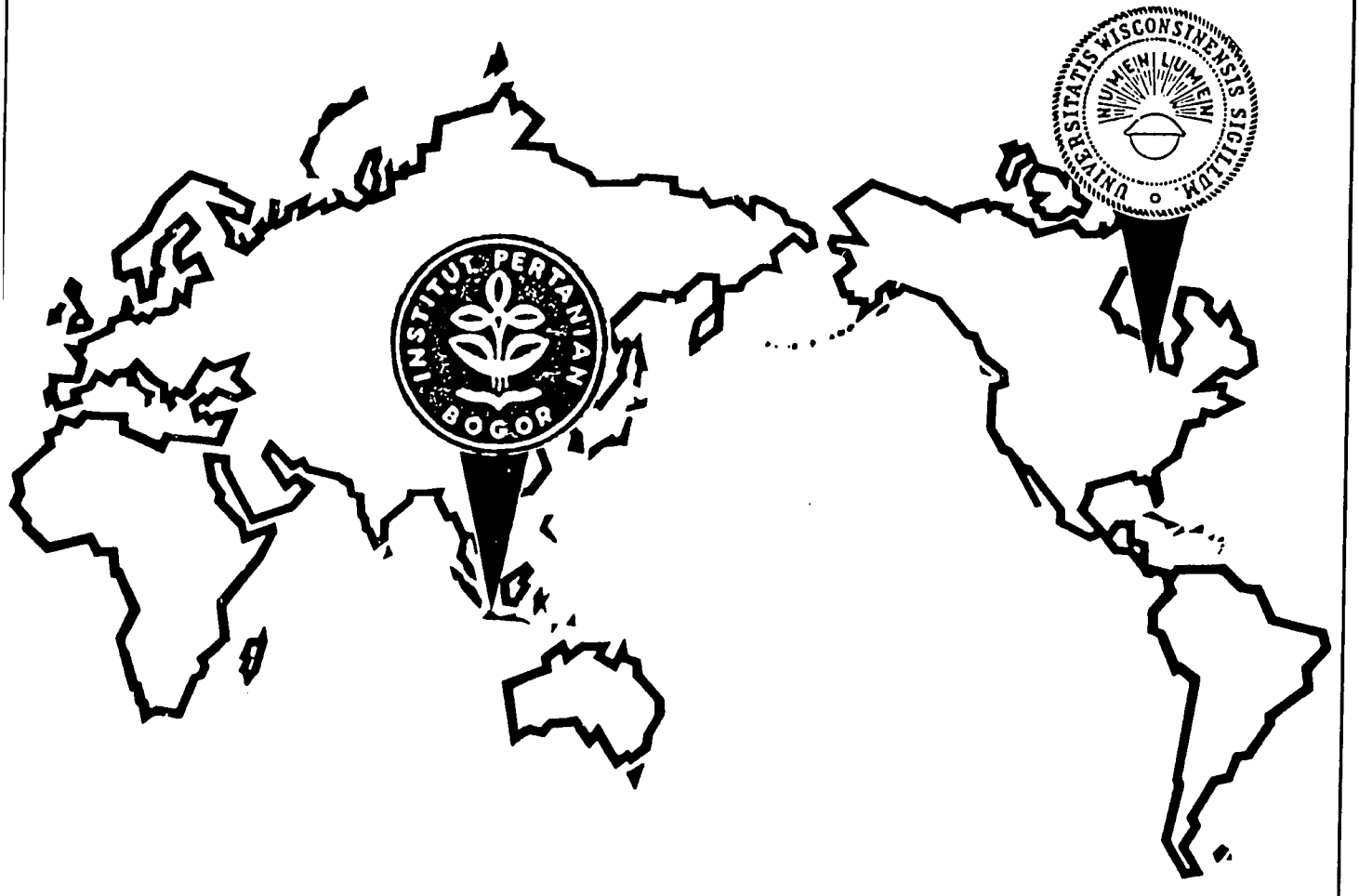
PD-AAI-656 497-0290

Institut Pertanian Bogor * University of Wisconsin

# GRADUATE EDUCATION PROJECT




**Aid Project 497-0290**

Report No. 7

BEHRENS

# AGRICULTURAL COMMUNICATIONS

IPB/UW GRADUATE EDUCATION PROJECT

INSTITUT PERTANIAN BOGOR

BOGOR, INDONESIA

John H. Behrens

June 29, 1981

# FOREWORD

After acceptance of the invitation to participate as the agricultural communications consultant for the IPB/UW Graduate Education Project with the Institut Pertanian Bogor, I was invited to come to Madison, Wisconsin, by Dr. Wayne R. Kussow for consultation. On May 6, I met with Dr. Kussow, Dr. James Edsall and Dr. Leroy Zweifel to discuss plans and designs for the Information Resources Center to be built on the Darmaga campus of IPB.

I was provided a program statement for the building and spent a day after returning to Illinois drafting a possible set of recommendations for use with the architectural firm of Perkins and Will. Copies of this statement were sent to Jim Edsall and Leroy Zweifel, and a copy was taken to Indonesia for study.

My wife and I arrived in Jakarta on June 5 and proceeded to Bogor to commence duties at IPB on June 6.

The three objectives of my assignment as outlined by Dr. John Murdock were:

1. Establish plans for the further development of an effective agricultural communications program at IPB.
2. Develop a list of commodities needed to establish a strong information and communications unit in the Information Resource Center.
3. Develop plans for future collaboration of the advisor and short-term training of IPB staff in this area.

This report is submitted as four parts:

Part I: General plans for the Communication Media Center including suggested training programs.

Part II: Design recommendations for the Communication Service Center.

Part III: Video production facilities for the Communication Service Center.

Part IV: A list of commodities for the Communication Service Center of the Information Resource Center.

## PART I: GENERAL PLANS FOR THE COMMUNICATION SERVICE CENTER

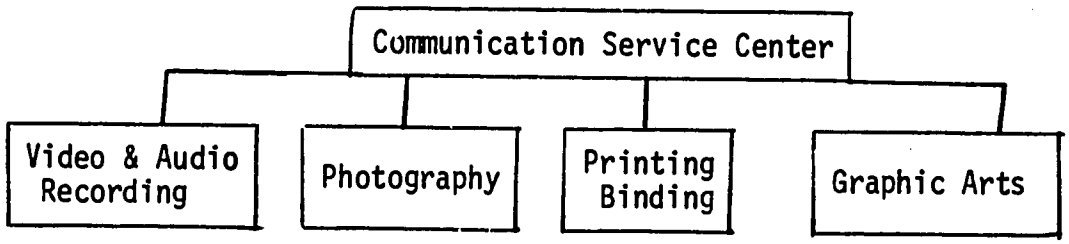
Even though my assignment at IPB was designated as an agricultural communications specialist, I recommended that the title, Communication Service Center, be used to designate and describe the communications functions of the Information Resources Center.

The term agricultural (pertanian) seems to be restrictive because of the faculty designation. The mission of the IPB will broaden in years to come to include other disciplines related to agriculture but not agriculture in name. This reasoning directs me to selecting a name that is more universal and will be more meaningful to all of the IPB faculties.

I can visualize two courses of action to follow in organizing the services of the operating units housed in the new Information Resources Center. Option 1: Establish a Technical Implementing Unit known as the Information Resources Center with two divisions--Library and Communication Service Center. This plan would require a head and possibly one secretarial position. Duties would consist of developing liaison and cooperation between the faculties and institutes and possibly budget direction.

Option 2: Establish two Technical Implementing Units--a Communication Service Center and the Library. I would recommend this approach if possible. Under this system, each unit head could report directly to the proper administrative superior. These decisions must be made by the administrative staff of the Institut Pertanian Bogor.

The following organization is recommended for the Communication Service Center:




Recommended Staff and Qualifications

Center Head: 1. Current IPB faculty member with an advanced degree (M.S. or Ph.D.).

2. A dynamic individual with ambition and willingness to cooperate with other faculties and institutes.

3. Assigned full time immediately so that specialized training can be processed.

4. Receive 9 to 12 months specialized nondegree training at a United States land-grant university.

Clerical Secretary to the Head: Current IPB requirements.

Video & Audio Producer: 1. IPB graduate so he will have a feeling for the subject matter and staff personnel.

2. Assigned as soon as possible to the position so specialized U.S. training can be developed.

3. Meet TOEFL requirements.

4. Interested in the field.

Assistant Video & Audio Producer: High school graduate as a minimum requirement. B.S. from IPB recommended.

Offset Operater

Bindery Operator

Graphics Illustrators (2)

Photographer

Darkroom Technician

Editor

Composing Machine Operator (initially a typist for later training)

Laborers (as needed for the shop, printing shop, video recording.

Specialized Training Needs

Overseas - Communications Center Head: 11-12 months at the University of Illinois starting January 15, 1982. See attachment #1 for detailed suggested program. University of Wisconsin alternate.

Video/Audio Producer: 4 months at the University of Illinois (University of Wisconsin alternate) starting approximately July 15 and terminating December 15, 1982. Person would apprentice in the television and radio sections of the Office of Agricultural Communications and learn the basic skills of video and audio work by actually doing the tasks.

Assistant Video/Audio Producer: Apprentice training should be arranged for audio (radio) work with the Agricultural Information Center--Kayuambon, Lembang, initially. Approximately two months should be spent at the University of Illinois (October 15 to December 15, 1982) apprenticing in the television field with the other two participants.

(I am assuming that the slots for participants from the Information Resource Center identified as Support Systems for Mass Media and Publications can be shifted to accommodate the needs for video and audio training.)

LPPM: One person from this area should study extension publications at the University of Wisconsin as indicated for three months.

Indonesia - Offset Operator: Training is offered by commercial companies in Jakarta. I imagine that the equipment will be A-M which is handled by P. T. Datascrip, Jl. Angkasa 18, Jakarta. Training will probably have to be contracted if the presses are brought overseas. After this initial training, an apprenticeship at the Agricultural Information Center Kayuambon at Lembang would be helpful.

Other skill positions (photographers/illustrators/editor) can probably be hired from the Indonesian employment pool, possibly can be transferred from other positions with IPB.

Projected Staff Additions After the Communication Service Center Begins Operations

Professional - The Institut Pertanian Bogor should give very serious consideration to the addition of a staff member in the field of instructional resources. This position could provide the liaison and developmental expertise to work with faculty members to improve their competency in teaching methodology and media utilization. The position could also assist with IPB training and should be staffed by a doctorate holding person. I recommend training for this area at the University of Indiana, Bloomington, Indiana.

Additional media personnel--writers and trainers--will be needed by the IPB in a few years. Location of these positions should be in the LPPM program with the work being accomplished in the Communications Media Center.

Nonacademic - As the printing and publication load increases, it will be necessary to move to machine composition. A skilled typist can usually be trained for this position. A basic knowledge of printing is needed and training is offered by companies such as P. T. Paramount of Jakarta.

Additional labor and clerical positions will need to be added as production loads increase and positions can be added to the budget.

## General Recommendations

The Communication Service Center should operate with the philosophy of cooperation and a high degree of job interchangeability. The photographers will be called upon to work with video taping crews for an example of this type of need. Vice versa, other skills may be needed to help graphics or photography sections as work loads and demands for personnel vary from situation to situation.

The head of the unit must especially be aware that his position will require a constant selling of quality services.

Personnel of the Communication Service Center must constantly be aware that they are a service organization to the entire IPB and must be willing to work accordingly. In the same manner, they should be adequately compensated for work well done so the IPB will remain competitive in the Indonesian job market.

The Institut Pertanian Bogor should start planning basic communications skills courses for addition to the undergraduate curricula of its faculties. The possible addition of the Illinois/IPB program in agricultural communications at the graduate or technical level will undoubtedly help the undergraduate program at IPB.

A final concluding recommendation is that in no other profession does the axim, "Cleanliness is next to Godliness," prevail as critically as it does in the field of communications. Communications media personnel must be critical housekeepers to prevent contamination of delicate electronic equipment, offset plates and negatives, photographic films and plates, and artwork from dust, humidity, and fungi.

Current plans are for the Information Resource Center to be centrally air conditioned and checking must be continuous during construction so that adequate temperature and humidity controls can be maintained. The recommended temperature and humidity for libraries are adequate for communications equipment. Storage cabinets for electronic and photographic equipment must be of metal construction and provided with heaters (light bulbs work satisfactorily) to prevent mildew and fungi infections.

I wish to extend my thanks to the University of Wisconsin staff at IPB and to the staff of the IPB for their planning and arrangements. The assignment has been most interesting and productive from a personal standpoint.

I am deeply interested in the success and continuation of the project and am willing to continue working with the project in the future as a possible consultant to the program of Perkins and Will and to supervise training of participants assigned to the University of Illinois for training. I can also foresee the need to revisit the IPB near the completion of the building program to work with program participants and other staff in organizing beginning operations and will try to participate if needed. Other later visits toward the completion of the project may be needed and again I will try to participate if

arrangements can be made. I will also be happy to prepare detailed equipment lists and specifications for commodity purchases as required by the project.

PART II: DESIGN RECOMMENDATIONS FOR THE COMMUNICATION SERVICE CENTER

This part is included as Attachment #2. This communication was addressed to Dr. Ikin Mansjoer, M.Sc., Head, IPB Planning Board on June 26 for his meeting with the Wisconsin staff and Perkins and Will personnel in Chicago on July 20-21, 1981

PART III: Video Production Facilities for the Communications Media Center

This part is included as Attachment #3. This communication was prepared for Dr. Ikin Mansjoer, M.Sc., Head, IPB Planning Board at his request and submitted to him on June 26.

PART IV: COMMODITIES FOR THE COMMUNICATIONS MEDIA CENTER

Detailed lists and specifications will be provided after my return to the United States in cooperation with Dr. Wayne Kussow and the University of Wisconsin--Madison.

A basic list of commodities needed to equip the Communications Media Center by functions follows: (Note: Items followed by this symbol "I" will need to be imported. Items followed by this symbol "D" are available from domestic Indonesian scurces by rupiah purchase.)

Immediate Priority

| Service | Quantity | | Item |
|---|---|---|---|
| Photographic | 1 | I | Enlarger condenser/diffusor with color head |
| | 1 | I | Enlarging easel |
| | 1 | I | Darkroom timer |
| | | I | Negative developing tanks, trays, safelights, and miscellaneous items |
| | 1 | I | Print washer |
| | 1 | I | Print dryer |
| | 1 | I | Camera, 35 mm, SLR, Nikon F3 body |
| | 1 | I | Lens, Nikon, 35 mm f 2.8 Auto-Nikkor |
| | 1 | I | Lens, 55 mm f 3.5 Macro-Nikkor |
| | 1 | I | Lens, Nikon, 24 mm f 2.8 Auto-Nikkor |
| | 1 | I | Lens, 135 mm f 2.8 Auto-Nikkor |
| | 1 | I | Camera, Nikon, FE with 50 mm f 1.4 Auto Nikkor lens |
| | 1 | I | Slide sorting light table |
| | 1 | I | Portable lighting kit |
| | 2 | I | Vivitar 285 flash units and accessories |
| | 2 | I | Tripods |
| | 1 | I | Copy stand |
| | 1 | D | Refrigerator for film storage |
| Graphic Arts | 1 | I | Graphic Arts Camera, Vertical* |
| | 2 | I | Graphic Film Processors* *will also service printing |
| | | D | Trays and miscellaneous items |
| | 2 | D | Drafting tables with drafting machines |
| | | D | Triangles, rulers, pens, scissors and general graphic supplies |
| | 1 | I | 3M Secretary Transparency Maker |
| Composing | 1 | I | IBM Selectric II typewriter with interchangeable typing elements |
| Video Recording | | I | See listing included as attachment #3 If Polytechnic Institut request is approved and IPB management agrees, this basic list could be reduced as indicated. |
| | 2 | I | Sony U-Matic video players, VP-2031 |
| | 2 | I | Sony PVM-1850PS Colour Video Monitors |
| | 2 | I | Monitor supports stands |

| Service | Quantity | | Item |
|---|---|---|---|
| Preview/ Conference (A-V items) | 2 | I | Kodak S-AC2020S Slide Projectors |
| | 1 | I | Dissolve Unit |
| | 1 | I | Stacking stands |
| | 2 | I | Projection Stands |
| | 1 | I | 16 mm Sound Motion Picture Projector |
| | 2 | I | Screens, Da-Lite 60" x 60" |
| | 1 | I | Screen, Wall, Da-Lite, 72" x 96" |
| | 1 | I | Wollensak Tape Recorder/Player Synchronizer |
| | 2 | I | 3-M Overhead Projectors with stands |
| Audio Recording* | 4 | I | Microphones |
| | 2 | I | Reel-to-Reel Recorders, Sony |
| | 2 | I | Cassette Recording Decks, Sony |
| | 1 | I | Phonograph Turntable |
| | 1 | I | Mixer/Control Console |
| | 1 | I | Amplifier |
| | 2 | I | Monitor Speakers |
| | 2 | I | Headphones |
| | 2 | I | Portable battery operated cassette recorders |
| | | | *If the Polytechnic Institut request is approved and IPB decides on one video center, some of that equipment might be available for audio recording. |
| Printing | 1 | I | Offset press Multigraphic AM 1250 N, maximum sheet size 11.7" x 17" |
| | 1 | I | Platemaker |
| | 1 | I | Lineup/stripping table |
| | 1 | I | Spiral punch binder |
| | 1 | I | Perfect binder |
| | 1 | I | Paper cutter (size and whether hand or powered to be determined) |
| | 1 | I | Stapler, Power |
| | 1 | I | Drill, Paper |
| Utility Shop | | D | Hammers, saws, rulers, squares, stapling guns (general hand tools for working wood and metal) |
| | | | Secondary Priority |
| Composing | 1 | I | Compugraphic type film composing unit |
| Media Classroom/ Laboratory | | I | Equipment items to be designated. Basically recorders, 35 mm SLR cameras, and similar items. |

ATTACHMENT 1: SUGGESTED TRAINING PROGRAM FOR THE COMMUNICATION SERVICE HEAD, COMMUNICATION SERVICE CENTER, INSTITUT PERTANIAN BOGOR, BOGOR

Objective:

To provide specialized and individualized training to the head of the Communication Center unit of IPB, Bogor, Indonesia, in the ares of basic agricultural communications skills and methodology.

Method:

The employment needs of the IPB staff member will be matched to a series of existing but unpatterned courses and specially planned in-service programs with the Office of Agricultural Communications, College of Agriculture, University of Illinois. The program will not lead to an academic degree but a formal certificate of completion may be granted.

Implementation:

Financial support will need to come from the IPB/UW Graduate Education Program at IPB and arrangements completed with representatives of the Program of Overseas University Collaboration at the University of Illinois.

Supervision will be provided by a program director (probably John Behrens) from the Office of Agricultural Communications.

The University of Illinois spring semester starts on January 18, 1982. It is suggested that the trainee be in place somewhat prior to this time for orientation and establishment of housing.

Candidate Qualifications:

The Institut Pertanian Bogor will be responsible for selection of

the candidate with interests and credentials that will best meet the needs of their program. It is suggested that the candidate have a Master's degree in Agricultural Extension or a related field as a minimum and have some actual service experience.

Possible Course of Study:

Spring Semester 1982

Agricultural Communications 214--Agricultural Communications Strategy.
Coordinated approach to planning and carrying out a program of agricultural information and education using a variety of communications media; students study principles of strategy to actual communications problems of their choice. (3 hours)

Agricultural Communications 460--Teaching of College Level Agriculture.
Analysis and preparation for the problems encountered in the effective teaching of college-level agriculture and home economics; systems approach, including instructional objectives, assessment of students, instructional strategies, materials, and student performance evaluation; and detailed study of individual problems supplements class work. (2 to 4 hours)

Broadcast Communications--Radio Writing and Broadcast.
(Course is under preparation and will have catalog listing later) (3 hours.)

Vocational and Technical Education for Rural Development in Low Income Countries.
Study of educational institutions needed to further rural development in developing nations; emphasizes educational programs that enable rural families to improve their quality of life. (3 or 4 hours)

Agricultural Communications Internship Projects--Conducted under supervision of Agricultural Communications staff and consists of study in Media Services, Instructional Media, Teaching, and Instructional Resources.

Summer

Continuation of in-service education program with intensive 'hands-on" experience and projects.

Fall Semester 1982

Agricultural Communications 114--Introduction to print, broadcast, visual, and other major communications media used to convey agricultural information; development in basic skills in communicating through these media. (3 hours)

Agricultural Communications 240--Application of visual communications principles to agriculture using the photograph as a medium; emphasizes communicative, creative, and technical aspects. (3 hours)

Journalism 204--Typography.

Study of type lore and design; type dimensions; printer's arithmetic and copyfitting; platemaking; printing processes; shop organization; and terminology. (3 hours)

Business and Technical Writing 251--Business and Administrative Communication.

Study of communication as a tool of administration and management; practice in writing a wide variety of types and forms of communication; and inclusion of oral and visual communication with the written to provide an integrated approach. For the student whose career will be in administration and management and requiring a broad range of communications skills. (3 hours)

Agricultural Communication Internship Projects--Continuation of initial package of study with the Office of Agricultural Communications. This unit will feature intensive hands-on production training, especially in video and audio recording with fellow staff members from IPB.

Alternatives:

If arrangements cannot be made with the University of Illinois, I will work with John Fett of the University of Wisconsin-Madison to develop a similar program at that institution.

## ATTACHMENT 2: DESIGN RECOMMENDATIONS, COMMUNICATION SERVICE CENTER, INFORMATION RESOURCES CENTER, INSTITUT PERTANIAN BOGOR

### Forward

I wish to state that I am not a specialist in library management and operation. I have had eighteen years of cooperative experience with the librarian of the Agricultural Library of the College of Agriculture, University of Illinois. This working relationship has resulted in development of an auto-tutorial carrel system involving audiotapes, super-8 motion pictures, 35 mm slides (via microfiche conversion), and Betamax 1/2" videocassettes. A unique feature of this system is that audiovisual materials are checked out like reserve book items and students operate from individual carrels. No central control system is used.

I have over twenty-five years of audiovisual experience and have prepared and supervised remodeling of Mumford Hall facilities for the present Office of Agricultural Communications. A Communications and Publications Center for the J. Nehru Agricultural University of Jabalpur, India, was designed and implemented from July, 1968, through July, 1971. In November, 1980, I served as design consultant to the University of West Indies, Faculty of Agriculture, St. Augustine, Trinidad, for the Agricultural Communications facility.

### Introduction and Background

On May 6, I was invited to the University of Wisconsin campus at Madison by Wayne R. Kussow to confer with Dr. James Edsall and Dr. Leroy Zweifel on IPB building plans.

I was able to observe photographs of the model of the proposed Information Resources Center for IPB and study plans for the development of the Darmaga campus. They also provided me with a copy of the Space Program-Priority Buildings prepared by Perkins and Will along with a copy of the minutes of the April 8 meeting held at IPB to review the Perkins and Will design presentation.

At the request of Drs. Edsall and Zweifel, I prepared a preliminary set of comments and proposals based on the Perkins and Will program statement. This was forwarded to them about May 13, 1981. A copy is enclosed (Enclosure 1).

Since arriving in Indonesia, I have studied the library systems of the IPB and other organizations in Bogor and Jakarta in the company of Pak Fahidin and Miss Teena. In addition, I have received a very thorough and complete briefing of the Public Service Institute activities under the guidance of Pak Juju Wahju and his staff.

I have also been able to study the following documents: A Program for the Proposed New Library and Learning Resources Center by Frazer Poole; Master Plan Report-Draft for the Institut Pertanian Bogor, Darmaga Campus by Perkins and Will; and Bogor Agricultural University Library by Fahidin.

Part 1 - Reevaluation of Program Statement of Perkins and Will

(Please refer to enclosure #1, Part I, Pages 1 and 2.)

No changes of my recommendations and comments for this section with the exception of the second part of paragraph 3.5.1 are to be made. The statement that duplication facilities in the "quick-copy" category should be included needs to be changed. Observations of activities at IPB

and other libraries indicate that a photocopy service is needed in lieu of an automated duplicated service. This can be handled adequately in the foreseeable future by the printing sections of the Communications Media unit.

Part II - Study of Proposed Information Resource Center for IPB

A. The floor plans prepared by Perkins and Will were made available to me when I arrived at the Institut Pertanian Bogor. Study and evaluation of these plans in comparison to the program statement resulted in identifying the following spaces as functions of the Communication Service Center (identified as Media Services by Perkins and Will) with my comments included:

Level 1 - Space 10 - Sound Studio

Triangular space not efficient.

Double doors contribute to acoustic problems.

Only one entry needed.

Space 11 - Media Control

Space too large. Doorway into media classroom will interfere with acoustics and operations.

Space 12 - Media Classroom

Poorly located for access without interfering with production or student carrels. Rectangular shape preferable.

Space 13 - TV Studio

Much undersized. No provisions for control studio. Joint operation with media classroom not recommended. Ceiling heights inadequate. Minimum of 4 meters needed. Five meters optimum.

Space 14 - Photo Production

No darkroom space indicated. No light locks for darkroom entry.

Space 15 - Microfilm production

These are library functions and should not be incorporated into Communications Media areas.

Level 2 Space 12 - Media Production Room (81 $m^2$)

Entry on main level. Access to media carrels through work area. Interpretation of plans difficult, but indications are that stairs would produce interfering traffic patterns.

Space 13 - Media Service Offices

Two are indicated at 16 $m^2$ each. Offices are exceptionally large. (Standard for University of Illinois is 120 sq. ft.) Same problems as indicated for space 12 apply to this space.

Level 3 Space 5 - Printing Facility

Plan indicates 405 $m^2$. Program statement indicates 250 $m^2$. Facility has no access for paper. Should be located on lower level to minimize traffic conflicts, noise pollution to other areas.

The program statement from Perkins and Will indicated the following space allocations for the Communication Media function:

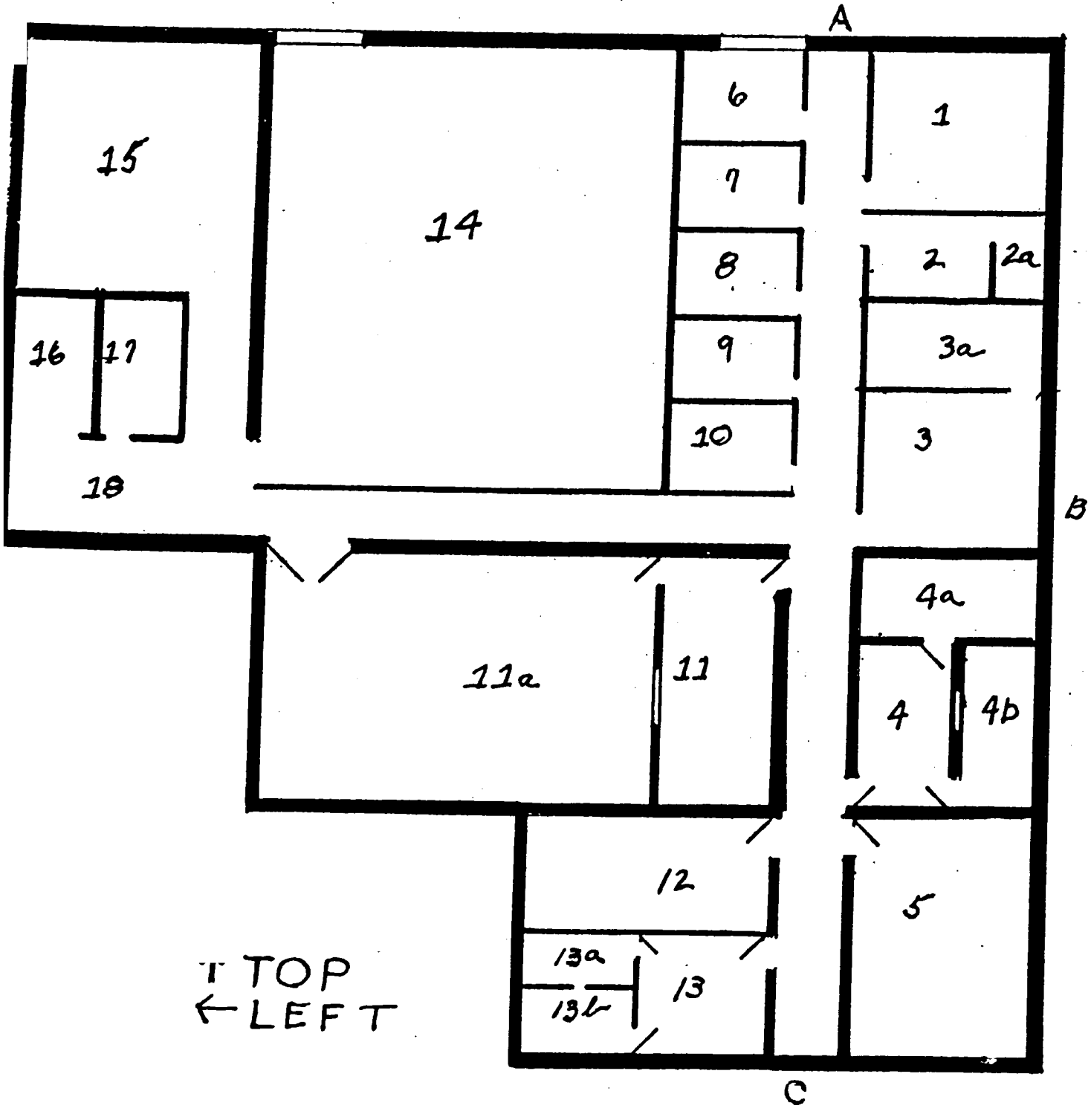
| | |
|---|---|
| Publications Office | 15 $m^2$ |
| Media Services | |
| Chief's Office | 20 $m^2$ |

| | |
|---|---|
| Assistant Office | 16 $m^2$ |
| Clerk Typist | 12 $m^2$ |
| Clerical Work | 10 $m^2$ |
| TV Studio | 45 $m^2$ |
| Sound | 12 $m^2$ |
| Photo | 40 $m^2$ |
| Media Production | 60 $m^2$ |
| Media Classroom | 60 $m^2$ |
| Media Control | 60 $m^2$ |
| Printing Shop | 250 $m^2$ |
| Total | 600 $m^2$ |

B. My original estimate of space requirements as indicated in Enclosure #1 suggested an area of 1,088 square meters. The program statement of Perkins and Will showed 600 square meters dedicated to Communications Service activities.

After local study and observations on site at the IPB campus, a compromise plan was developed requiring 972 $m^2$. Figure 1 illustrates one possible adaptation of the existing floor plan on level 1 to Communications Media needs. Possible entries to the facility could be made at points A, B, or C as indicated on the plan. Location would actually depend upon the rest of the building layout with preferences for A or C. Use of B would result in loss of graphic arts space to hallway which would need to be compensated for in some fashion. Service to the unit would be from the elevator from the receiving area on level 2.

This area would provide a compact facility of all related communications activities isolated from general traffic of the library facility.




COMMUNICATIONS SERVICES

1 Photographic Studio/Office
2 Print/Negative Darkrooms
3 Graphic Arts Workroom/Darkroom
4 Media Laboratory Darkroom/Audio
5 Media Classroom
6 Section Head Office
7 Mass Media
8 Instructional Resources
9 Editor
10 Composing
11 Television Control/Studio
12 Preview/Conference
13 Audio Recording
14 Print Shop
15 Utility Shop
16 Elevator
17 Elevator Machine
18 Receiving Area

A
B Possible Area Entrances
C

Space allocations under this suggested plan are:

| | | |
|---|---|---|
| 1-2 | Photography Studio/Darkrooms | 63 $m^2$ approximately |
| 3 | Graphic Arts | 63 $m^2$ approximately |
| 4 | Media Laboratory | 63 $m^2$ approximately |
| 5 | Media Classroom | 63 $m^2$ approximately |
| 6 | Chief's Office | 15 $m^2$ approximately |
| 7-10 | Offices (6 @ 12 $m^2$) | 96 $m^2$ approximately |
| 11 | Television | 162 $m^2$ approximately |
| 12 | Preview/Conference | 36 $m^2$ approximately |
| 13 | Audio Recording | 36 $m^2$ approximately |
| 14 | Print Shop | 224 $m^2$ approximately |
| 15 | Utility Shop | 72 $m^2$ approximately |
| | Hallways | |

Part III - Revised Recommendations for Communication Service Facilities in the IPB Information Resource Center

If the recommendations made in paragraph B of Part II (including the layout of Figure 1) are not adaptable to the final building plan, alternate proposals can be accepted. These changes should consider the following factors:

1. All functions of the Communications Media Center should be centrally located in the same area, away from the general traffic plan of the library users, in as compact an area as possible.

2. Space allocations indicated previously in Part I should be considered as minimums. In no case should the television area be reduced

in size. The print shop, the graphic arts area (not darkroom), the utility shop, and media classroom could be expanded in size if design space is available. Rectangular rooms are more efficient for the type of service operations projected.

3. Any specific recommended changes in separate functions are indicated by handwritten notes in Enclosure 1.

Attachment 2
Enclosure 1

# COMMENTS AND PROPOSALS

FOR THE

# INFORMATION RESOURCE CENTER

# INSTITUTE PERTANIAN BOGOR

# INDONESIA

PREPARED FOR

THE UNIVERSITY OF WISCONSIN-MADISON

JOHN H. BEHRENS

UNIVERSITY OF ILLINOIS

MAY 13, 1981

# PART I

## COMMENTS ON INFORMATION RESOURCE CENTER

## IPB PROGRAM STATEMENT

Comments on Information Resource Center

IPB Program Statement

Paragraph 3.1 -

(Table 1-Figure 2) The division chief of Media Services is indicated as a professional librarian. I would tend to disagree with this. This person should a person trained in media production and should come from Communications or Education backgrounds. I believe these talents would be more in keeping with the job needs. A librarian is more likely to be trained in media storage, retrieval, and distribution rather than production.

Paragraph 3.5.1 -

The program states that no off-campus distribution is comtemplated, yet the proforma for the Agricultural Communications specialist requests help in planning facilities for publication and mass media. If the Institute is to develop public services and do out-reach activities such as some form of extension activities, printing facilities are vital. The program statement says that halftone reproduction is not planned. I think this is vital. I will agree that four color process printing is not recommended, but I do think the facility should have the capability of doing color work. (line color)

I would agree that a facility such as is now in place in the University of Wisconsin Engineering Library should be placed in the building. This "quick-copy" concept could be used to produce 'dikta' and similar items from camera ready typewritten copy. Offset capability of large runs should be an additional feature.

Paragraph 3.5.2 -

Needs to be expanded in order to more adequately meet the needs of the Institute.

Paragraph 4.4

A ceiling height of 8.5 to 9.5 feet (2.59 to 2.89 meters) is not adequate for television production do to need for suspended lighting grids and headspace for lamps. Fifteen feet is about minimum with a twelve foot headspace under the grid and lights.

Paragraph 4.16

No provision is made for public (non-student) access to the Information Services mentioned under Public Services.

Paragraph 5.0 - Space Allowances for Media Services Divison

Carrel spaces satisfactory. Television studio too small. Sound recording too small. Photography is probably short. In general these facilites are all too small and will result in cramped and inefficient operations.

I personally see microfiche and microforms as a library function and not a general Institute service. If such services are needed. library personnel should provide them.

# PART II

## SUGGESTED FACILITIES
## TO
## PROVIDE INFORMATION RESOURCES
## SERVICE
## FOR
## INSTITUTE PERTANIAN BOGOR

for
Institute Pertanian Bogor

| | Square Meters | | | Page |
|---|---|---|---|---|
| Receiving/Shipping | | | | 1-1B |
| Print Processing/Storage | 204 | 250 | 224 | 2-2B |
| Audio Processing | 50 | 12 | 36 | 3 |
| Videotape-Motion Picture Processing/ Storage | 248 | 100 | 162 | 4-4C |
| Shop Facility/Storage | 190 | [redacted] ✓ | 72 | 5 |
| Graphic Processing/Storage | 104 | 60 | 63 | 6-6A |
| Photographic Processing/Storage | 76 | 40 ✓ | 63 | 7-7B |
| Instructional Resources | 12 ✓ | | | 8 |
| Communications Teaching Laboratory | 120 | 60 | 126 | 9 |
| Agricultural Publications | 60 ✓ | | | 10 |
| Media Services | 24 ✓ | | 96 | 11 |
| Display Areas | | | | 12 |
| Total | 1,088 sq. meters | | | |

36

Conference Area

OJECT: IPB Information Resources Center ELEMENT: Agr. Com.

COMPONENT Receiving/Shipping

| | Sq. Ft. | Sq. M. |
|---|---|---|
| Dock--Loading /Unloading | | |

FUNCTION & RELATIONSHIPS

Shared with library

no change

ENVIRONMENTAL REQUIREMENTS (General Construction, Building Systems, Special Requirements)

1. Roof overhang to provide weather protection
2. Two truck capacity.

EQUIPMENT (To be part of contract)

EQUIPMENT ("ovable-supplied by com dity purchases)

JECT: IPB Information Resources Center ELEMENT: Agr. Com.

| COMPONENT Receiving/Shipping | Sq. Ft. | Sq. M. |
|---|---|---|
| Holding Area | | 30 |

FUNCTION & RELATIONSHIPS

Temporary holding area for incoming and outgoing shipments. Possible to share with library functions but should have access to other communications functions.

ENVIRONMENTAL REQUIREMENTS (General Construction, Building Systems, Special Requirements)

1. Roll-up doors to loading docks
2. Conventional lighting
3. Walk-in door

no change

EQUIPMENT (To be part of contract)

EQUIPMENT (Movable-supplied by commodity purchases)

JECT: IPB Information Resources Center ELEMENT: Agr. Com.

| COMPONENT | Receiving/Shipping | |
|---|---|---|
| | Sq. Ft. | Sq. M. |
| Processing | | 50 |

FUNCTION & RELATIONSHIPS

Assemble materials for shipping and assign incoming material to storage

ENVIRONMENTAL REQUIREMENTS (General Construction, Building Systems, Special Requirements)

1. Office 10 $M^2$
2. Work area 40 $M^2$

deleted in revised plan. Desirable if space available

EQUIPMENT (To be part of contract)

EQUIPMENT (Movable-supplied by commodity purchases)

JECT: IPB Information Resources Center ELEMENT: Agr. Com.

COMPONENT Print Processing/Storage

| | Sq. Ft. | Sq. M. |
|---|---|---|
| Production | | 80 |

FUNCTION & RELATIONSHIPS

Platemaking - Offset Printing - Collating - Binding

ENVIRONMENTAL REQUIREMENTS (General Construction, Building Systems, Special Requirements)

1. Airconditioned and humidity control
2. Workroom lighting
3. Sink with water for employee wash-up
4. Sink, large for roller and equipment clean-up
5. Outlets for electric machinery - Power 3,000 watts, 220v. 50 Hz

Revised Plans calls for 224 M². arrangement as shown here preferred.

EQUIPMENT (To be part of contract)

EQUIPMENT (Movable-supplied by commodity purchases)

PROJECT: IPB Information Resources Center ELEMENT: Agr. Com.

COMPONENT Print Processing/Storage

| | Sq. Ft. | Sq. M. |
|---|---|---|
| Storage | | 100 |

FUNCTION & RELATIONSHIPS

1. Store paper supplies (skids ?)
2. Store printed publications (shelving)

ENVIRONMENTAL REQUIREMENTS (General Construction, Building Systems, Special Requirements)

1. Warehouse lighting
2. Protection from pests (termites)

EQUIPMENT (To be part of contract)

Metal shelving (Flexible in arrangement)

EQUIPMENT (Movable-supplied by commodity purchases)

PROJECT: IPB Information Resources Center ELEMENT: Agr. Com.

COMPONENT Print Processing/Storage

| | Sq. Ft. | Sq. M. |
|---|---|---|
| Offices | | 24 |

FUNCTION & RELATIONSHIPS

Offices for supervisor and clerk

ENVIRONMENTAL REQUIREMENTS (General Construction, Building Systems, Special Requirements)

1. Air conditioned
2. Outlets for typewriters, calculators, etc.

EQUIPMENT (To be part of contract)

EQUIPMENT (Movable-supplied by commodity purchases)

JECT: IPB Information Resources Center ELEMENT: Agr. Com.

COMPONENT Audio Processing

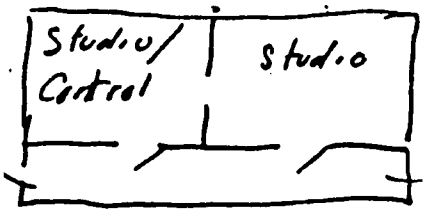
| | Sq. Ft. | Sq. M. |
|---|---|---|
| | | 50 |
| mezzanine | | 36 |

FUNCTION & RELATIONSHIPS

| | |
|---|---|
| Office | |
| Studio | 10 $M^2$ |
| Studio/Control combination | 10 $M^2$ |
| Duplicating (dubbing) tapes area) | 10 $M^2$ |
| Storage ) | 20 $M^2$ |

ENVIRONMENTAL REQUIREMENTS (General Construction, Building Systems, Special Requirements)

1. No fluorescent lighting to eliminate radio frequency interference and ballast noise.
2. Airconditioning with regard to no noise interference.
3. Acoustically isolated in the building with double wall construction. Visible linkage between the two studios is desirable [redacted]l. Entrance to the studio and studio/control room should be from a common sound lock in the form of a secondary hallway.
4. Studio and studio/control should have acoustical treatment--sound absorbing walls and ceiling with carpeted floors.




– see revised plan

EQUIPMENT (To be part of contract)

EQUIPMENT ("ovable-supplied by commodity purchases)

PROJECT: IPB Information Resources Center ELEMENT: Agr. Com.

COMPONENT Videotape-Motion Picture Processing/Storage

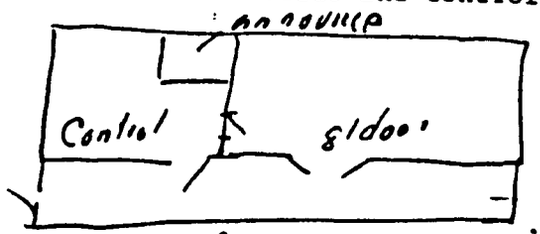
| | Sq. Ft. | Sq. M. |
|---|---|---|
| Studio/Control Room | ~~measurement~~ revised | ~~—~~ 150 162 |

FUNCTION & RELATIONSHIPS

| | |
|---|---|
| Studio | 120 M 2 |
| Control/Editing Room | 24 M 2 |
| Announce Booth | 6 M 2 desirable |

ENVIRONMENTAL REQUIREMENTS (General Construction, Building Systems, Special Requirements)

1. Aircondition with regard to system noise interference
2. Acoustically isolated with double wall or low sound transmission construction Entrance to studio should be via sound lock. Entrance to control room should be direct from access hall. Entrance from studio to control room should be possible with an interior door. Announce booth should be accessible from control room.
3. No windows.
4. Minimum ceiling height should be 15 feet with provision for a lighting grid that will provide at least 12 feet of headspace.
5. Visible linkage between the studio and control room is important.




see revised plan

EQUIPMENT (To be part of contract)

Lighting Grid — 10,000 watts studio 3,000 watts control

Cyclorama drop

EQUIPMENT (Movable-supplied by commodity purchases)

UNIT: IPB Information Resources Center ELEMENT: Agr. Com.

| COMPONENT | Videotape-Motion Picture Processing/Storage | |
|---|---|---|
| | Sq. Ft. | Sq. M. |
| Office | | 12 |

FUNCTION & RELATIONSHIPS

Provide space for supervisor or director of unit and allow client consultation.

ENVIRONMENTAL REQUIREMENTS (General Construction, Building Systems, Special Requirements)

1. Airconditon
2. Electrical outlets

Desirable, but control room adequate

EQUIPMENT (To be part of contract)

EQUIPMENT (Movable-supplied by commodity purchases)

JECT: IPB Information Resources Center ELEMENT: Agr. Com.

COMPONENT Videotape-Motion Picture Processing/Storage

| | | Sq. Ft. | Sq. M. |
|---|---|---|---|
| Storage | Shell desirable | | 62 |

FUNCTION & RELATIONSHIPS

| | |
|---|---|
| Videotape-Film Storage | 20 M $^2$ |
| Equipment Storage | 30 M $^2$ |
| General Supply Storage | 12 M $^2$ |

ENVIRONMENTAL REQUIREMENTS (General Construction, Building Systems, Special Requirements)

1. Videotape-film storage - airconditioned with humidity control
2. Equipment storage - airconditioned with humidity control and access to elevator and/or loading dock.

EQUIPMENT (To be part of contract)

EQUIPMENT (Movable-supplied by commodity purchases)

UNIT: IPB Information Resources Center ELEMENT: Agr. Com.

COMPONENT Videotape-Motion Picture/Processing

| | | Sq. Ft. | Sq. M. |
|---|---|---|---|
| Motion picture film editing | delete | | 24 |

FUNCTION & RELATIONSHIPS

Assemble and edit work prints for motion picture production

ENVIRONMENTAL REQUIREMENTS (General Construction, Building Systems, Special Requirements)

1. Air conditioned with humidity control
2. Acoustic treatment

EQUIPMENT (To be part of contract)

EQUIPMENT (Movable-supplied by commodity purchases)

CT: IPB Information Resources Center ELEMENT: Agr. Com.

COMPONENT Videotape-Motion Picture Processing/Storage

| Screening Room (Review) (could be combined with suggested conference room) | Sq. Ft. | Sq. M. |
|---|---|---|
| | | 36+ |

FUNCTION & RELATIONSHIPS

View films and videotapes for approval. Showing for small audiences.

ENVIRONMENTAL REQUIREMENTS (General Construction, Building Systems, Special Requirements)

1. Airconditioned
2. Acoustic treatment
3. Capable of darkenigg. Dimmer lights would be advantageous

EQUIPMENT (To be part of contract)

EQUIPMENT (Movable-supplied by commodity purchases)

PROJECT: IPB Information Resources Center ELEMENT: Agr. Com.

COMPONENT Shop Facility/Storage

| | | Sq. Ft. | Sq. M. |
|---|---|---|---|
| Shop<br>Office<br>Storage | can be one space<br>60 M²<br>10 M²<br>120 M² | | 190 |

FUNCTION & RELATIONSHIPS

Provide space to construct sets if neede for television and provide beginning facility for construction of exhibits and displays.

ENVIRONMENTAL REQUIREMENTS (General Construction, Building Systems, Special Requirements)

1. Noisy. Procedures general noise. (Power saws, hammering, etc.)
2. Should be convenient to loading dock for delivery of supplies and moving of exhibits in and out.
3. Electric outlets for power tools. Possible air exhaust for painting procedures.

EQUIPMENT (To be part of contract)

EQUIPMENT (Movable-supplied by commodity purchases)

PROJECT: IPB Information Resources Center ELEMENT: Agr. Com.

COMPONENT Graphic Processing/Storage

| | | | | |
|---|---|---|---|---|
| Art stations (2) | combine | 24 M$^2$ | Sq. Ft. | Sq. M. |
| Office | | 12 M$^2$ | | |
| Storage | | 12 M$^2$ | | 63 |

FUNCTION & RELATIONSHIPS

This section should prepare artwork for offset printing, slide production, motion picture-videotape titles and animation, overhead transparencies, posters, silk screens, signs, and similar activities. Art stations should have movable dividers.

ENVIRONMENTAL REQUIREMENTS (General Construction, Building Systems, Special Requirements)

1. Air conditiong
2. Drafting room light conditons

EQUIPMENT (To be part of contract)

EQUIPMENT (Movable-supplied by commodity purchases)

PROJECT: IPB Information Resources Center ELEMENT: Agr. Com.

COMPONENT Graphic Processing/Storage

| | | Sq. Ft. | Sq. M. |
|---|---|---|---|
| Darkroom | 16 M $^2$ | | |
| General Purpose Room | 40 M $^2$ | | ~~56~~ |

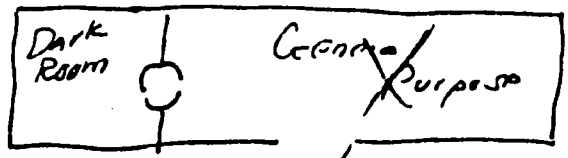
FUNCTION & RELATIONSHIPS

Darkroom for art camera process. General purpose room for silkscreening and poster preparation in particular.

ENVIRONMENTAL REQUIREMENTS (General Construction, Building Systems, Special Requirements)

1. Darkroom-sink facilities to accommodate 16 x 20 materials. Lighttrap entrance from art room or general purpose room. Airconditioned. No windows.

2. General purpose room-sink (large) for cleaning silkscreens. Airconditioned with possible need exhaust for solvents and chemicals.




see revised plan
This concept desirable

EQUIPMENT (To be part of contract)

Sinks

EQUIPMENT ("ovable-supplied by commodity purchases)

Vertical (art or stat) camera. Silk screen equipment.

_CT: IPB Information Resources Center ELEMENT: Agr. Com.

COMPONENT Photographic Processing/Storage

| | | Sq. Ft. | Sq. M. |
|---|---|---|---|
| Office | 12 M 2 | | |
| Storage | 12 M 2 | | 24 |

FUNCTION & RELATIONSHIPS

Pages 7-7a-7b combined in revised plan -

Provide space space for the operation of photographic service to produce black & white and color services.

63 M² minimum, this design not refused

ENVIRONMENTAL REQUIREMENTS (General Construction, Building Systems, Special Requirements)

1. Airconditioned

EQUIPMENT (To be part of contract)

EQUIPMENT (Movable-supplied by commodity purchases)

ɔcCT: IPB Information Resources Center ELEMENT: Agr. Com.

COMPONENT Photographic Processing/Storage

| | Sq. Ft. | Sq. M. |
|---|---|---|
| Studio | | 30 |

FUNCTION & RELATIONSHIPS

ENVIRONMENTAL REQUIREMENTS (General Construction, Building Systems, Special Requirements)

1. Airconditoned
2. No windows
3. Sink with running water - to mix chemicals and provide clean-up facilities for studio operations

EQUIPMENT (To be part of contract)

EQUIPMENT (Movable-supplied by commodity purchases)

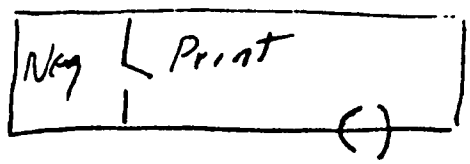
COMPONENT Photographic Processing/Storage

| | | Sq. Ft. | Sq. M. |
|---|---|---|---|
| Negative Darkroom | 6 M 2 | | |
| Print Darkroom | 16 M 2 | | 22 |

FUNCTION & RELATIONSHIPS

ENVIRONMENTAL REQUIREMENTS (General Construction, Building Systems, Special Requirements)

1. Aircondition-humidity control
2. Light trap entrance
3. Sink- in negative darkroom approximately 16 x 20 inches
   in print darkroom to accommodate four 16 x 20 trays with temperature controlled water and wash sink approximately 16 x 20 inches.




EQUIPMENT (To be part of contract)

Sinks

EQUIPMENT (Movable-supplied by commodity purchases)

Enlarger, dryers, and related items

JECT: IPB Information Resources Center ELEMENT: Agr. Com.

COMPONENT Instructional Resources

| | Sq. Ft. | Sq. M. |
|---|---|---|
| Offices | designated as an office | 12 |

FUNCTION & RELATIONSHIPS

Provide space for an instructional materials designer and consultant to work with staff and provide liason and coordination between production units

ENVIRONMENTAL REQUIREMENTS (General Construction, Building Systems, Special Requirements)

1. Aircondition

EQUIPMENT (To be part of contract)

EQUIPMENT (Movable-supplied by commodity purchases)

PROJECT: IPB Information Resources Center ELEMENT: Agr. Com.

COMPONENT Communications Teaching Laboratory

| | | Sq. Ft. | Sq. M. |
|---|---|---|---|
| Classroom | 80 $M^2$ | | |
| Darkroom | 16 $M^2$ | | |
| Audio Room | 12 $M^2$ | | 120 |
| Storage | 12 $M^2$ | | 126 |

FUNCTION & RELATIONSHIPS see revised plan - this preferred

To provide a space for training staff in communications techniques and expansion of communications programs and curriculum as outlined in the proforma for the agricultural communications specialist.

ENVIRONMENTAL REQUIREMENTS (General Construction, Building Systems, Special Requirements)

1. Airconditioned.
2. Lighttrap on darkroom. Small darkroom facility with sink to handle 3 11 x 14 trays, and print washer.
3. Audio room needs acoustic treatment only. (to use for practice with audio recording, etc.)

EQUIPMENT (To be part of contract)

1. Darkroom sink

EQUIPMENT (Movable-supplied by commodity purchases)

PROJECT: IPB Information Resources Center ELEMENT: Agr. Com.

| COMPONENT | Agricultural Publications | | |
|---|---|---|---|
| | | Sq. Ft. | Sq. M. |
| Offices for Editors (2) | 24 M $^2$ | | 60 |
| Office for photocompositor | 12 M $^2$ | | |
| Proofreading Office | 12 M $^2$ | | |
| Clerical Office | 12 M $^2$ | | |

FUNCTION & RELATIONSHIPS Provide space for preparation of agricultural publications.

offices - revised plan

ENVIRONMENTAL REQUIREMENTS (General Construction, Building Systems, Special Requirements)

1. Aircondition
2. Isolated power circuit for photocompositor

EQUIPMENT (To be part of contract)

EQUIPMENT (Movable-supplied by commodity purchases)

Photocompositor

PROJECT: IPB Information Resources Center

ELEMENT: Agr. Com.

COMPONENT Mass Media

| | Sq. Ft. | Sq. M. |
|---|---|---|
| Offices for 2 Editors<br>see revised plan | | 24 |

FUNCTION & RELATIONSHIPS

Provide materials for mass distribution-radio, newspapers, etc.

Work in same area and possibly parallel to publications. Share clerical help.

ENVIRONMENTAL REQUIREMENTS (General Construction, Building Systems, Special Requirements)

EQUIPMENT (To be part of contract)

EQUIPMENT (Movable-supplied by commodity purchases)

PROJECT: IPB Information Resources Center ELEMENT: Agr. Com.

| COMPONENT | Display Areas | | |
|---|---|---|---|
| | | Sq. Ft. (as possible) | Sq. M. |

## FUNCTION & RELATIONSHIPS

Located in lobbies, entrances, halls for display of material

## ENVIRONMENTAL REQUIREMENTS (General Construction, Building Systems, Special Requirements)

1. Should provide lighting
2. Security for display materials.

## EQUIPMENT (To be part of contract)

## EQUIPMENT (Movable-supplied by commodity purchases)

ATTACHMENT 3: VIDEO PRODUCTION FACILITIES FOR INSTITUT PERTANINAN BOGOR

1. The best interests of the Institut Pertanian Bogor can best be served if one video production facility is established as part of the Communications Media Center to be established at this Institut.

Savings in money and personnel will result along with increased efficiency of operation if the service is provided by trained specialists. There is little merit in a system of fragmented operations and collections of little used equipment.

Necessary provisions will need to be made so that the facility is available upon schedule and financially feasible.

This unit as designed is not suitable for production of broadcast television programs. Such equipment is beyond the financial reach of a university and requires extremely qualified technicians to operate and maintain.

The main strength of the unit is for the preparation of training materials for students of the various faculties, for training faculty members, and for use in the programs of the Public Service Institute. The unit can also provide duplication services in limited quantities for distribution of materials for library carrel holdings. It can also be used to duplicate materials from sources outside the Institut Pertanian Bogor for internal use.

2. Figure 1 is a schematic diagram of a suitable studio layout for the production of educational materials. Two cameras and the telop system (live cards) provide an extremely flexible system in combination with the automatic editing control. Slides can be taped when projected on a

# VIDEO STUDIO

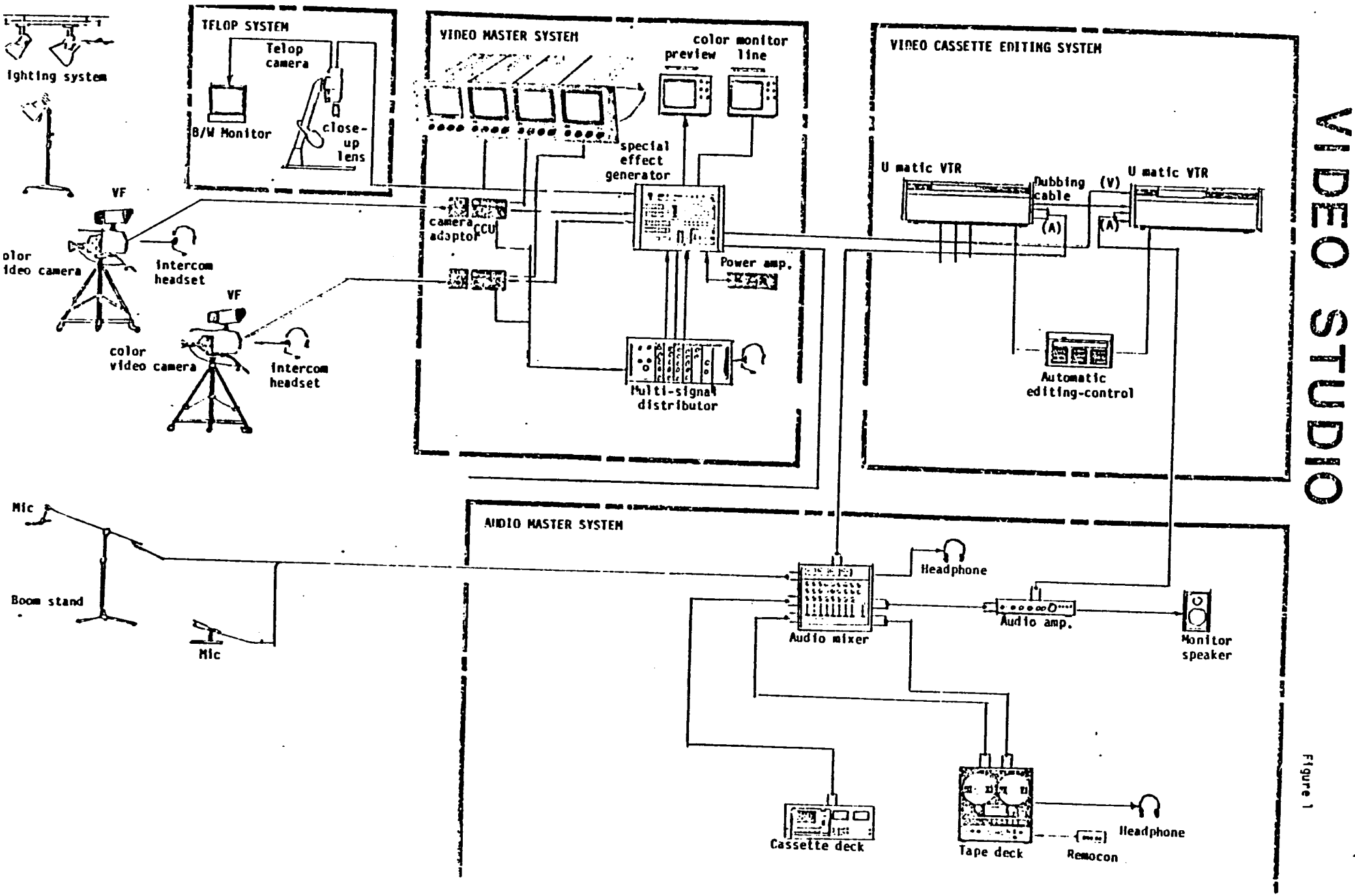



Figure 1

suitable high gain screen. Videotapes from the portable field unit can be incorporated with the editor in complete instructional units. The cameras selected for this unit can be also used in portable locations for electronic field productions. The recommended audio system gives the final capability needed for efficiency and the production of materials of the highest quality.

3. Figure 2 is a schematic diagram of the video control console. The equipment is mounted in conventional 19" EIA standard racks. These are standard for mounting electronic equipment and should be mounted on a table of local fabrication.

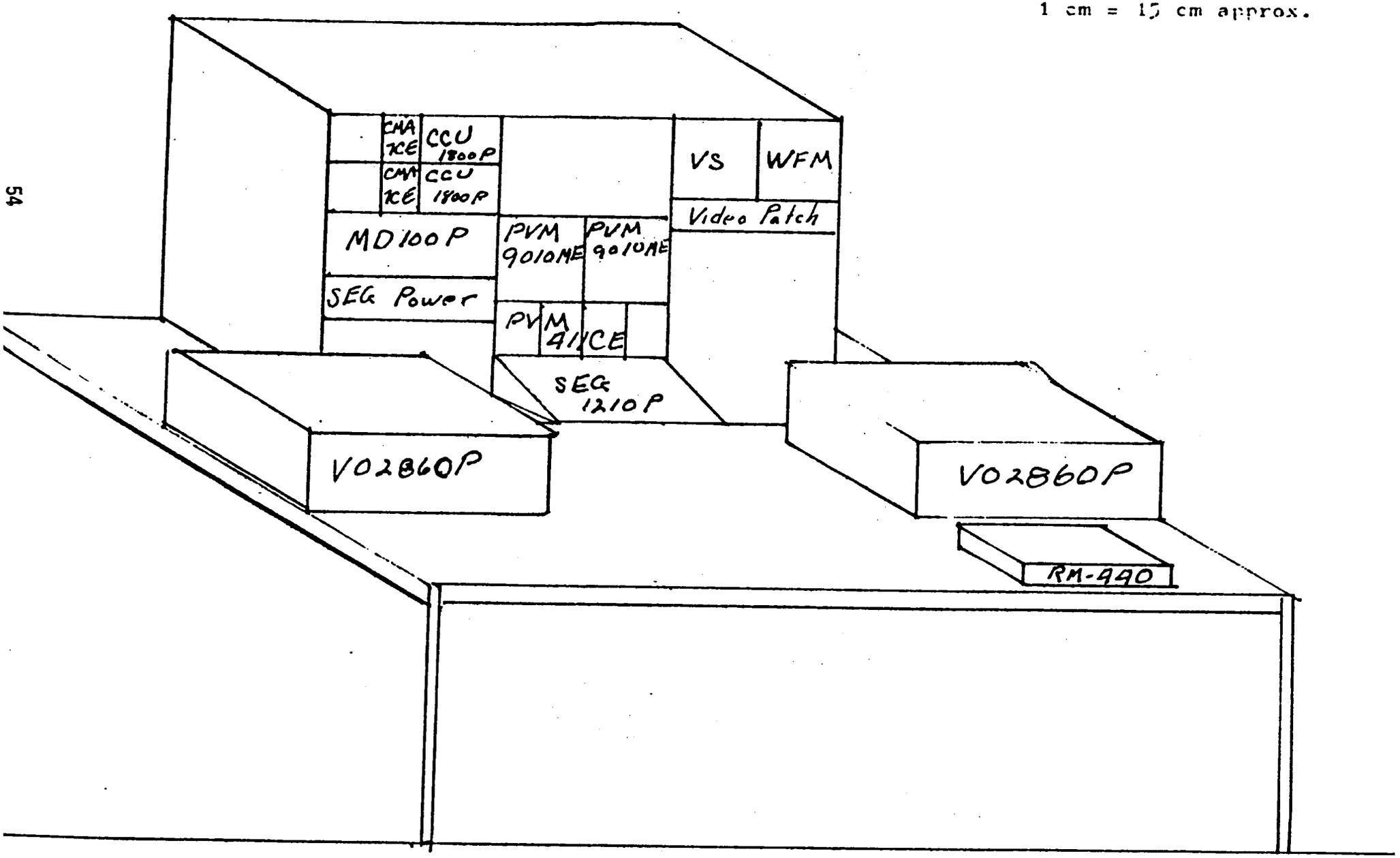
4. Figure 3 is a suggested floor plan layout for a conventional control studio as outlined in paragraph 2 above.

5. Table 1 is a listing of required equipment. All of the equipment, unless listed otherwise, is manufactured by Sony. The equipment not manufactured by Sony is available from their sources. Items marked with an * can be reduced in quantity if the pending request for equipment for the Polytechnic Institut is approved and received.

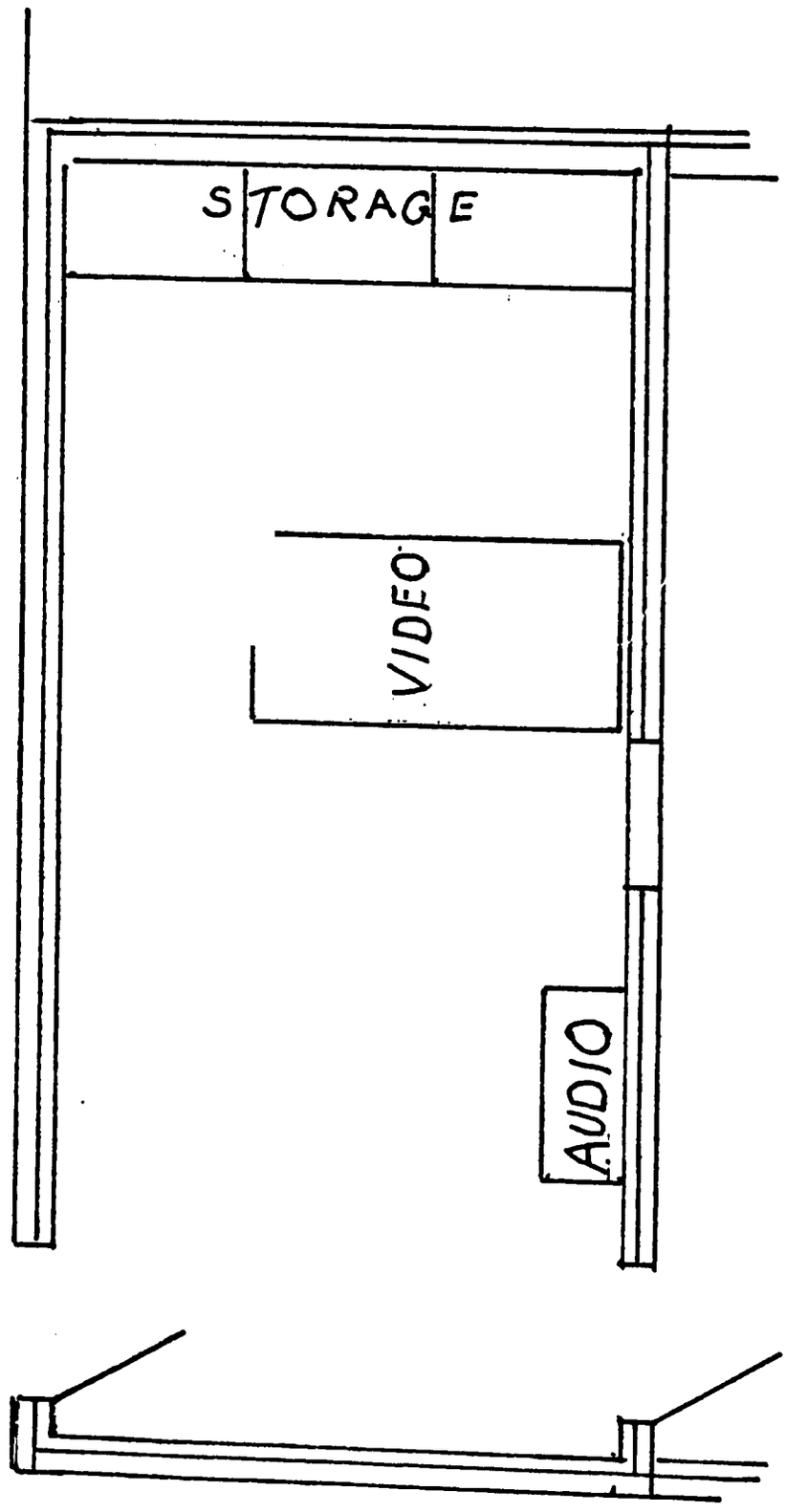
6. Decisions on the number of distribution (viewing) units will need to be made by faculties using video materials. I do not recommend a central distribution (wired from a control center) system for classrooms. Mobile units--a video cassette player, VP-2030/2030CE and a monitor mounted on a castered display stand--will serve many classrooms. One 19" monitor can serve from 25 to 30 students. Larger classrooms will need multiple monitors. One player can drive up to four monitors without significant

VIDEO CONTROL DESK

Scale
1 cm = 15 cm approx.



CONTROL STUDIO FLOOR PLAN



loss of program quality. Consideration should be given to video projection systems for large classrooms. A Sony KP 7210PS can be effectively used in rooms 10 meters deep and 6 meters wide as a replacement for multiple monitors. A Sony KP 5010PS will work effectively in a room 5 meters deep and 4 meters wide. A projector must be driven by a cassette player.

A central distribution system should be installed in carrel systems planned for the Library portion of the Information Resource Center.

7. A complete technical specification must be listed when ordering equipment. These specifications are available from Sony and will prevent ordering of less satisfactory equipment that will not be compatible with other components. A sample specification is shown as Table 2.

8. A video products brochure is attached. The listing will show items listed on the equipment list outlined in red.

TABLE 1

Sony Video Equipment List

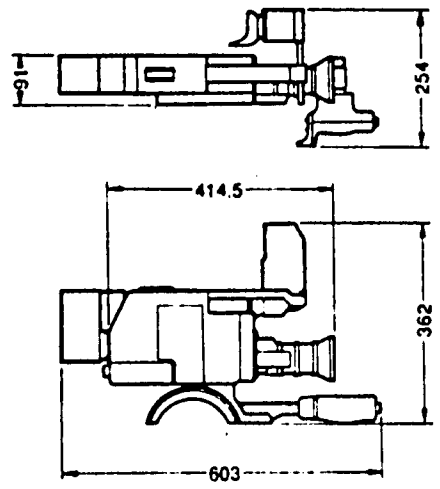
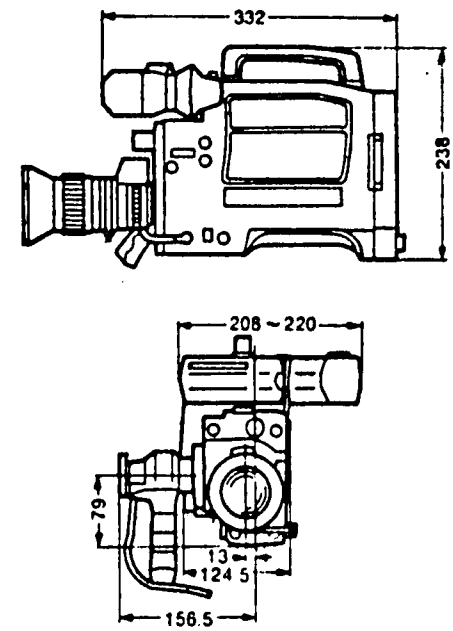
| Quantity | |
|---|---|
| 2* | Colour Video Camera, Sony DXC-1800-PK |
| 2* | Flexible Cable Units, LO-22 |
| 2 | Camera Control Unit for DXC-1800 P Cameras, CCU-1800P |
| 2 | Rack mounting metals, RMM-1800 |
| 1 | Multisignal Distributor, MD-1600P |
| 1 | Colour Special Effects Generator, SEG-1210 P |
| 1 | Monochrome Video Monitor, PVM-411CE |
| 2 | Colour Video Monitor, PVM-9010 ME |
| 1 | Mounting Bracket, MB-500 A |
| 2* | Electronic Viewfinder, 4" for DXC-1800 P Camera, DXF-40CE |
| 1 | Waveform Monitor, Tektronix 528 |
| 1 | Vectorscope, Tektronix 1420 |
| 1 | Mounting Bracket, MB-500A |
| 1 | Mounting Attachment, MB-501 A |
| 2* | Videocassette Recorder/Players, VO 2860 P |
| 1 | Automatic Editing Control, RM-440 |
| 1 | Dubbing Cable, VDC-5 |
| 2 | Tripod/dolly with oil head, SAM-TPD-205<br>or alternate choice<br>Tripod/dolly SAM-TPD-3 (less expensive but lower quality) |
| 1 | Monochrome TV Receiver/Monitor, CVM-111 E (Telop system) |
| 1 | Monochrome Video Camera, AVC-3250CES (Telop system) |
| 1 | Camera Stand (Telop System) (Available from a photographic supplier) |

| Quantity | |
|---|---|
| 1 | Close-Up Lens Set, 37mm filter size (available from a photographic supplier) |
| 4 | Microphones, ECM-150 |
| 4 | Microphone Extension Cords, EC-5 M |
| 1 | Microphone F-115 |
| 1 | Microphone Cable EC-10C2, 10 meters |
| 5 | Headsets, Intercommunication, DR-10A |
| 1* | Audio Mixer, MX-20 |
| 1 | Mini Speaker System, SS-5GX |
| 1 | Monaural Open-Reel Tape Deck, TC-707FC |
| 1* | Stereo Cassette Deck, TC-K81 |
| 1* | Integrated Stereo Amplifier, FA-F30 |
| 2 | Stereo Headphones, MDR-3 |
| 2 | Quartz Spot Light, LQS-5 |
| 10 | Lamps, B8-32 |
| 4 | Quartz Focusing Light, LQF-6N |
| 10 | Lamps B8-32 |
| 2 | Upper Horizon Light, UHQ-10 (optional) |
| 10 | Lamps, B15-32F (for preceeding light) |
| 1 | Portable U-Matic Videocassette Recorder, VO-4800PS |
| 2 | Rechargeable Battery Pack, BP-60 |
| 1 | Battery Charger, BC-20CE |
| 1 | Color Portable Video Monitor, PVM-9000ME |
| 1 | Carrying Case for PVM-9000ME, VLC-51 |
| 1 | Rechargeable Battery Pack for PVM-9000ME, BP-80EB |
| 2 | Connecting Cables, CCQ-25AR |

| Quantity | |
|---|---|
| 1* | Connecting Cable, CCQ-10AR |
| 2 | Connecting Cable, CCDD-2.5 |
| 2 | Connecting Cables, CCDP-06 |

Note: No video connecting cables using BNC connectors have been listed. These can usually be fabricated locally for less money. They can be purchased from Sony. I can specify if needed. Similarly, no audio cables or connecting cords have been specified. Lengths of some microphone cables will depend upon studio configuration. Most of these items seem to be available on the local market and can be fabricated as needed. Not all items are shown in this brochure. Further help may be obtained from PT Galva, Jl Hayan Duruk, Jakarta. Telephone 348511. In addition, I have a set of current catalogs of Sony products and will be willing to give more information if you wish to correspond.

# Colour video cameras

| Specifications \ Model | DXC-1800P | DXC-1840P |
|---|---|---|
| Outstanding features | Studio/portable | Portable |
| Pick-up tube | ⅔" SMF Trinicon tube | ⅔" MF Trinicon tube |
| Electronic viewfinder | 1½" monochrome | 1½" monochrome |
| Lens | F1.4, 11 70mm zoom lens with auto-iris/macro mechanism | F1.4, 11 70mm zoom lens with auto-iris/macro mechanism |
| Lens mount | C-mount | C-mount |
| Scanning system | 2:1 interlaced, 625 lines, 50 fields | 2:1 interlaced, 625 lines, 50 fields |
| Horizontal frequency | 15.625kHz | 15.625kHz |
| Vertical frequency | 50Hz | 50Hz |
| Horizontal resolution | 300 lines | 300 lines |
| Sensitivity | 2,000 lux (200 footcandles), F4 | 2,000 lux (200 footcandles), F2 |
| Vide output | 1.0Vp-p, sync negative, 75 ohms, unbalanced, PAL | 1.0Vp-p, sync negative, 75 ohms, unbalanced, PAL |
| Sync system | Internal/external | Internal/external (with optional CMA-6P) |
| S/N (Luminance) | 48dB | 45dB |
| Power requirements | DC 12V<br>AC 240/220/127/110V ±10%, 50/60Hz (with the optional CMA-7CE) | DC 12V<br>AC 240/220/127/110V ± 10%, 50/60Hz (with the optional CMA-5CE) |
| Power consumption | DC 13.3W (with viewfinder DXF-3CE)<br>AC 75W max. (with the CMA-7CE) | DC 12W<br>AC 24W (with the CMA-5CE) |
| Operating tempernture | 0 - 40°C (32 - 104°F) | 0 - 40°C (32 - 104°F) |
| Weight | 3.1 kg (6 lb 13 oz)<br>6.6 kg (14 lb 9 oz) with lens, viewfinder, battery adaptor and battery pack, brace | 4.9 kg (10 lb 13 oz) with viewfinder and lens<br>6.6 kg (14 lb 9 oz) with viewfinder, lens, battery adaptor and optional battery pack |
| Connectors: BNC | Video OUT, Genlock IN | Video OUT |
| Connectors: Phone | ---- | Mic IN (external) |
| Connectors: Mini | Ext mic IN, Earphone, Incom | Earphone jack |
| Connectors: 14-pin (CCQ) | Camera OUT | Camera OUT |
| Dimensions |  Unit: mm |  Unit: mm |