

AGENCY FOR INTERNATIONAL DEVELOPMENT  
 WASHINGTON, D. C. 20523  
**BIBLIOGRAPHIC INPUT SHEET**

FOR AID USE ONLY  
*Batch 85*

1. SUBJECT CLASSIFICATION	A. PRIMARY Education	JC36-0000-G140
	B. SECONDARY Audio-visual materials--Kenya	

2. TITLE AND SUBTITLE  
 Planning for the audio visual equipment and commodity needs, Kenya Ministry of Health

3. AUTHOR(S)  
 Berndtson, B.E.

4. DOCUMENT DATE 1977	5. NUMBER OF PAGES 82p.	6. ARC NUMBER ARC 614.07.B524
--------------------------	----------------------------	----------------------------------

7. REFERENCE ORGANIZATION NAME AND ADDRESS  
 APHA

8. SUPPLEMENTARY NOTES (Sponsoring Organization, Publishers, Availability)

9. ABSTRACT

10. CONTROL NUMBER <i>PN-AAF-637</i>	11. PRICE OF DOCUMENT
12. DESCRIPTORS Equipment Family planning Health education Kenya  Manpower	13. PROJECT NUMBER
	14. CONTRACT NUMBER AID/pha-C-1100 GTS
	15. TYPE OF DOCUMENT

PLANNING FOR THE AUDIO VISUAL  
EQUIPMENT AND COMMODITY NEEDS  
KENYA MINISTRY OF HEALTH

A Report Prepared By:  
BJORN E. BERNDTSON

During the Period:  
SEPTEMBER 5 THROUGH 24, 1977

Under the Auspices Of:  
AMERICAN PUBLIC HEALTH ASSOCIATION

Supported By The  
U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT  
OFFICE OF POPULATION, AID/pha/C-1100

AUTHORIZATION:  
Ltr. POP/FPSD: 3/23/77  
APHA Assgn. No.:

## Acknowledgment

No efforts were spared by everyone concerned to provide me with the necessary insight and feel for the actual situation and assist me in my task.

My special thanks goes to Mr. Mbai, who saw to it that all doors were open, solved the problem of transport, and last, but not least, never failed to have a hot cup of tea ready when the rain made things miserable.

I greatly appreciated the thoughtful assistance and stimulus provided by Mr. Thomas Lyons. His knowledge of the local situation and his experience was of great value for the consultancy.

## APPENDICES

- Appendix I    Equipment Lists
- Appendix II    Floor Plans
- Appendix III    Functional organization chart
- Appendix IV    Equipment for field educators and officers

PLANNING FOR THE AUDIO VISUAL  
EQUIPMENT AND COMMODITY NEEDS  
KENYA MINISTRY OF HEALTH

I. PURPOSE

The purpose of this consultancy was to assist the staff of the Kenya Ministry of Health, Health Education Unit (MOH/HEU) and the National Family Welfare Center (NFWC) in the design of a final listing of equipment and commodities to be provided by USAID/Nairobi. The scope of work included assessments of the equipment/commodity needs, the operational status of the current equipment, and the types and number of professional and technical staff to fully operate and maintain the unit.

II. PLANS OF THE NATIONAL MCH/FP PROGRAM

The tasks of the Program continue to be:

- a) to motivate the lower socio-economic groups to take advantage of the MOH and other agency services, and
- b) to inform the public about the need to use contraceptives and make it an acceptable social behavior, particularly in regard to solving health problems.

Parallel with this activity directed toward the general public, special information and pertinent data have been distributed and diffused to decision-makers in government and the private sector. The need to establish a demand within this group for easily available contraceptives, or services to be at the disposal of the general public, is still considered important.

III. PLAN FOR EXPANSION

The work so far has made it socially acceptable to use a contraceptive and to talk about means and methods without too much embarrassment. There exists however a considerable amount of misconceptions and the usual well-known rumours circulate freely.

To provide correct information in a variety of ways, education and persuasive elements, a new cadre of 817 field workers (FHFE) is to be placed at 400 service points, (17 to be working in mobile teams) and 46 supervisory officers will be working side-by-side with the 80 field educators employed by the FP Association of Kenya. These groups are to produce local I & E material for their own use and distribution.

Centrally, the production unit of the HED will contribute by producing relevant supportive material to re-inforce the work carried out by government and non-government interpersonal communication groups. This will probably be done relative to:

- (1) National mass media
- (2) Regional mass
- (3) District mass distributions, when possible
- (4) Local distribution, when possible
- (5) Support of field-worker's day-to-day work through "group media" production

#### IV. PROJECTED STAFFING PLAN

The following list specifies the professional personnel, initially available in 1977 to reach full capacity in 1980. As indicated, a few questions remain as to the final arrangement to reach full capacity.

Printing:	Photolithographer	1 ?
	Asst. Photolithographer (art sp.)	1 ?
	Dark-room assistant	1
	Machine Operators	2-4 ?
	Book binder	1
	Helpers	?
Photo:	Photographer	1
	Dark-room assistant	1
Graphic art:	Artist/Lithographer	?
Art:	Artist	?
	Assistant artist	1
Typesetting:	Composers	2
Editorial:	Copy typists	2
Shorthand typist		1
Audio-visual aids officers		3
(Possibly assigned to:	Recording Studio;	
	CCTV Studio;	
	Photostudio as producer)	

Executive Officer:		1
A. V. Library Assistant		1
Workshop:	Foreman	1
	Artisans	3
Clerical officers		4
Drivers		32
Attendants		10
Watchmen		2
Field workers - Supervisors:	HEO	12 + 28

The list suggests a professional staff of about 27 persons. They should be sufficient to undertake the work as planned. This is however conditional; if a number of divisions of the Ministry of Health demand work for their purposes, this new situation will severely limit the production devoted to F.P. and related topics.

It should, however, be pointed out that routine production would be severely handicapped if the editorial section is not established to assume day-to-day responsibility for subject matter, co-ordination and co-operation and to follow each project until it is realized.

At present there is no photo-lithographer to assume responsibility for the print production section.

The present photographer is not capable of taking care of administrative chores and necessary house-keeping.

The artists have not documented any particular illustrative skill, which indicates that arrangements for use of consultant might be necessary for such type of work.

The machine operators are doing quite well even as lithographers but have no knowledge of colour-separation. In the future they cannot be expected to do two jobs.

Pre-testing and survey results to guide the production staff are not provided from within the production organization. This is being considered by H.E.D.

Personnel in the area of recording; e.g., an electronic technician to be used also for electronic repair and maintenance, is not included in the list; however the HEU has the position and it should be filled.

The attached organizational chart (Appendix III), which is related to functions - not titles, indicates how these cadre can be deployed. It also indicates areas where strengthening of the work-group must be attempted to optimize the out-put. A person responsible for production, seconded by a responsible writer and a visualizer, must be seen as the key to the expected out-put -- both from the point of quality and quantity. Naturally, the team effort which is so necessary, is emerging from the head of production. His management and leadership skill, his knowledge in all aspects of production for media and last but not least his personality will be of importance. Such a person when chosen, might benefit from a temporary counterpart to provide on the job training.

#### V. NEEDS RELATIVE TO PRODUCTION AND DIFFUSION OF EQUIPMENT

The needs of the national MCH/FP programme relative to communication (I & E) support will increase tremendously when all the 800 field-workers are at their posts (1980). Crucial areas will be in editing, art, and printing. This is, however, a matter of increasing operational personnel; since production equipment has sufficiently large enough capacity to cope.

Diffusion equipment is another matter -- The planned film vans, their role and future utilization, is crucial here. Unfortunately this aspect is not settled. No detailed plans are available and no personnel organization is established. Use of locally produced slides, tapes and stencilled material might be the most practical way to solve this pertinent problem.

#### VI. EQUIPMENT - INSTALLATION AND RUNNING IN PERIOD

The equipment suggested is mostly of an adequate professional type and will need trained professionals and a period of adaptation to the new machines is to be expected. Trial and error should be avoided. Professionals familiar with the new equipment should assist during this period. Most would be available in Nairobi. However, existing personnel would have little difficulty to learn how to use the equipment.

Spare parts will continue to be a problem. Future handling of cost, requests, and purchase of spare parts is not possible to assess at this point.

The possibility to seek support by the UNICEF/PSC group should be explored. This production group consists of experts in photography, graphic art, video-taping, sound recording, photo-lithography and film making.

#### VII. REPAIR AND MAINTENANCE

In general, equipment used for 6-10 years or more need replacement. Some could be repaired and used for another year or two, but the job of getting 6-10 year old spare parts from the USA and a number of countries in

Europe and Japan would be no easy task. Some of the more expensive equipment could be put to use again, but it will take a year or two to get the job done. Some, on the other hand, are kept in the store and would need little attention to function for another plan period.

Stores are as good as can be expected but humidity and dust has taken its toll since no attention has been given to standard use of silica gel and covers. The localities which have been used up to now are terribly run down and very unsuitable and this has added to usual wear and tear. The situation can be expected to improve drastically.

#### VIII. OPERATIONAL STATUS OF EQUIPMENT

All considered, the operational status of the current equipment is fair. Measured with any standard, it is somewhat under-utilized in some areas but "overused" in other areas; e.g., in the workshop and in the 16 mm projection area.

#### IX. NEEDED PERSONNEL

In addition to the comments regarding personnel needs in the preceding Section IV, it is recommended that responsible personnel be secured or trained in the following areas:

- (1) Head of production
- (2) Editorial & script department
- (3) Lithography - graphic art
- (4) Photo
- (5) A.V. Library
- (6) Sound Studio
- (7) CCTV Studio (if equipment is called forward).
- (8) Maintenance personnel in the workshop and in the electronic repair shop.

#### X. TRAINING

Several of the existing staff, not only in the production group, might profit from participating in the training scheme arranged by UN organizations and the University of Chicago in late February 1978 or other similar training schemes.

#### XI. EQUIPMENT LISTS AND SPECIFICATIONS

Equipment lists in the following areas are attached (Appendix I): Photo, Art, Graphic Art and Print, Recording, CCTV, A.V. Library, Workshop, Elec. Maintenance, Field Support.

These lists provide current and detailed specifications: Item, quantity, brief description for identification, item cost, total cost, manufacturer (if necessary), and place of sale, catalog referred to. The list also specifies non USA manufacturer.

To the total price is added freight and handling (35% and 7%) for the purchasing agency. Air freight is suggested for a number of items to allow start of supportive production this year.

It is good policy to arrange for supervised use of new equipment. The following areas are particularly sensitive:

- (1) Printing and litho
- (2) Sound recording
- (3) CCTV
- (4) Electronic maintenance.

Such familiarizing would coincide with the installation of the delivery.

## XII. LOCATION PLANS

Drawings which are based on the architects plans but also particularly indicate the new equipment (parallel lines), placement of old equipment and suggestions relative to installation, appear in Appendix II.

The list and drawings which constitute the main part of this brief report are based on:

- (1) The work plan prepared by the World Bank Consultant assisted by the MOH staff headed by Mr. Mbai.
- (2) A continuous study of the day-to-day work of the HEU and its resources.
- (3) Frequent visits to the new centre together with staff members.
- (4) Daily discussions with Mr. Mbai, Mr. Lyons and the staff at the Centre. Weekly meetings were held to inform Mrs. Otete about progress. Participating in the meetings were Mr. Lyons, Mr. Steinborg, Mr. Mbai and Mrs. Otete.

APPENDIX I    LISTS

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
<b>Print Production Department (Offset Printing - Photo Litho)</b>						
1	1	Offset Press (as Solna, Model 125) Print area of at least 17½" x 25"; Sheet size of 18 1/8" x 25 3/16", 24V to 420V, 3 phase, 50 hz.	35,000.00	35,000.00	Solna Offset Sweden	Solna
2	1	Paper Cutter 30½" (as Challenge Model 305 MC) autom. clamp incl. 2 knives, side tables, paper deflector, tools	6,100.00	6,100.00	Challenge: El. spec. 230V 50Hz, three phase AC, 5 hp motor, 37 amp.	General Catalogue, page 97 General Printing Equipment and Supply Company Tel: 609-234-4400 Mt. Laurel, New Jersey 08057 114 Gaither Drive
3	2	Blades for Paper Cutter (as above No. 2238-2)	129.00	258.00	Challenge	General Catalogue, page 396
4	3	Hydraulic Oil, gallon for above Paper Cutter	6.95	20.85	Challenge	General Catalogue, page 185
5	4	Plastic Cutting Sticks for above Paper Cutter, pack as No. 4171-6	17.00	68.00	Challenge	General Catalogue, page 185
6	1	Folding Machine (as O&M 17.5-22.5 Friction Feeder) (perforates, scores and slits)	2,450.00	2,450.00	Challenge	General Catalogue, page 192
7	2	Numbering Machine (as Lions cat. no. 168-351)	14.75	29.50		Berkley/Cardy
8	1	Plastic Spiral Binding Machine (as Combo, to punch and bind)	495.00	495.00	General Binding Co.	Page 209

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
8a	5,000	Plastic Binding, 12" long X 1/2"	.07	350.00		General Catalogue
8b	5,000	Plastic Binding, 12" long X 3/4"	.07	375.00		"
9	1	Plate Maker (as Model FT26UP 23 x 27 inch, NUARC) Flip/top with halide lamp	1,795.00	1,795.00	NUARC Company, Inc. 4100 West Grand Ave. Chicago, Ill. 60651	General Catalogue, page 97
10	8	Replacement lamp (as No. HD49 for above) NUARC	95.00	760.00	NUARC	General Catalogue, page 97
11	1	Contact Frame (as Model VFC27P) 23 x 27 inch, with 1/6 hp vacuum pump	395.00	395.00	NUARC	General Catalogue, page 99
12	1	Contact Printing Lamp with point light source (as NUARC Model CP25)	150.00	150.00	NUARC	General Catalogue, page 99
13	3	Lamp, replacement for above (as NUARC Model VE66)	9.00	27.00	NUARC	General Catalogue, page 99
14	1	Transformer, 220 to 110V, 500W (for above frame and lamp)	50.00	50.00	Any	Off the shelf item
15	1	Plate Developing Sink 25" x 30" (as NUARC Model PS36)	595.00	595.00	NUARC	General Catalogue, page 101
16	2	Dark Room Sink 39 X 56 with viewer, with spray pipe (as NUARC FWV24X)	945.00	1,890.00	NUARC	General Catalogue, page 46
17	1	Film Drier, automatic (as Rogersol "Jetstream" model with variable speed) 220V, 50CC or additional transformer	895.00	895.00	Rogersol	General Catalogue, page 46

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost	Manufacturer	Catalogue
18	4	Storage Cabinet, steel drawers (as Fosters Model 604-5) 37" X 25"	60.00	240.00	Fosters Mfg. Co. 1200 Chestnut Street Philadelphia, Pa. 19107	Catalogue, page 55
19	1	Light Table (as No. BB42T by NIARC)	260.00	260.00	NIARC	General Catalogue, page 91
20	1	Densitometer (as Macbeth Model TD-500)	100.00	100.00	Macbeth	Catalogue, page 40
21	1	3M Direct Positive Plate Maker - Model ESP	1,500.00	1,500.00	3M Company	Factory
22	50	Paper Plate Rolls for above item	35.00	1,750.00	3M Company	Factory
23		Screens, Pre-Angled Gray Contact Screens (negative) (as Kodak)			Kodak	Kodak
23a	1	Cat. 150-9355	72.52	72.52	"	"
23b	1	Cat. 150-9377	72.52	72.52	"	"
23c	1	Cat. 150-9397	72.52	72.52	"	"
23d	1	Cat. 150-9413	72.52	72.52	"	"
24		Filters for camera, Kodak			"	"
24a	4	Federal 3", yellow, blue, green, red	3.00	12.00	"	"
25	1	Filter holder for above (tri-filter)	23.00	23.00	"	"
26	1	Collator, rotary (as Evans 48" double deck)	875.00	875.00	Evans	General Catalogue, page 225

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
27	3	Lap Rack for above Collator	15.00	45.00	Evans	General Catalogue, page 225
28	4	Collator, foldable (as Evans Model TU-718 with 18 sections and finger moistener)	32.50	130.00	Evans	General Catalogue, page 225
29	2	Stapler, electric (as Swingline No. 67)	54.00	108.00	Swingline	Catalogue, page 216
30	2	Stapler, saddle (as Swingline No. 615)	23.95	47.90	Swingline	Catalogue, page 216
31	8	Stapler, desk (as Swingline No. 747)	11.50	92.00	Swingline	Catalogue, page 216
32	60	Staples, for above electrical and desk staplers, in boxes of 5,000 (as Swingline No. SF4)	1.95	117.00	Swingline	Catalogue, page 404
33	50	Staples, for saddle stapler, in boxes of 5,000 (as Swingline No. SF15)	2.00	100.00	Swingline	Catalogue, page 404
34	1	Stapler, foot operated (as ACME Model 727)	495.00	495.00	ACME	Catalogue, page 215
35	100	Staples (for ACME Model 727) (as type 465 No. 465255 4" x ½"; box of 5,000)	5.70	570.00	ACME	Catalogue, page 215
36	1	Paper Drill (as Century Model manufactured by Challenge)	1,350.00	1,350.00	Challenge	" page 219
37	2	Replacement Drill for above	7.50	15.50	Challenge	" page 394

## HEALTH EDUCATION UNIT. (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
38	4	Metric conversion <u>scale</u> metal: 12" No. 625M	5.50	22.00		General Page 63
39	2	Scale, same but 24" No. 624M	7.80	15.60		
40a	2	Bindry trucks (as Model 22x36x6 <sup>2</sup> inch from Hodge)	130.00	260.00	Hodge Manufacturing Company 1228 Cherry Street Philadelphia, Pa. 19107	Factory
40b	4	Wheels, spare for above	15.00	60.00	Hodge	Factory
41	1	Paper Skid Mover, manual 4,500 lb. capacity (as Model "The Shuttle" from Crown Controls)	500.00	500.00	Crown Controls Corp. Pressman Avenue New Bremen, Ohio 45869	Factory
42	100	Staples (as British, SCCR, 25- <sup>1</sup> / <sub>4</sub> " (5000 in ea. box)	3.30	530.00	Bost inch	Off the shelf item

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
43	1	Platemaker, positive (as 3M "ESP" dry process, pressure fusing)	2,900.00	2,900.00	3M Company	
44	25	ESP toner (3M) dry.	24.00	600.00	"	
45	10 cart.	Paper plate, rolls 4 per cart., ESP 10" x 270 ft.	35.00	3.50	"	
46	25	Starter solution (gts.)	18.00	450.00	"	
47	1	Magnifier (as No. 543, Universal)	10.25	10.25		General, page 59
48a	1	Wax Coater (as Goodkin's adhesive wax coater)	395.00	395.00	Goodkins	General, page 80
48b	3	Wax (for above) (10 lb. carton)	24.00	72.00	"	"
49	3	Tape dispensers (as No. C-23, Heavy Duty, 3M)	10.75	32.25	"	"
50	10 boxes (of 2)	Tape (as 3M No. 616, 1/2")	5.46	54.60	3M Company	
51	1	Kodalite Pan Filter - 2568 (50 Sheets) 14" x 17", No. 153-5145	68.22	68.22	Kodak	
52	1	Kodalite Contact Film - 2571 14" x 17", No. 166-6023	41.96	41.96	"	
53.	10	Kodalite Film - Type 3-2556 16" x 20" No. 332-0181	63.50	635.00	"	

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
54	4	Kodak separation neg. film (Color Transp.) - 4131 14" x 17", No. 153-9352	109.99	439.96	Kodak	
55	2	Kodalite duplicating film - 2574 14" x 17", No. 140-9911	46.61	99.22	"	
56	5	Kodalite Developer (2 gal.) No. 146-5152	2.19	10.95	"	
57		Brushes (as Grumbacher Model 178)				
a	1 doz.	No. 00	1.60	19.20		General, Page 293
b	6	No. 05	3.00	18.00		"
c	3	No. 177	17.50	52.50		"
58a	2	Knife, utility (as Srifhold safety) No. 112	1.50	3.00		Page 63
b	10	Blades (for above knife)	3.00	30.00		"
59	3	Scales, metric-pica, 24"	7.80	23.40		"
60	300	Plates, offset negative 20" x 25 $\frac{1}{2}$ " (as 3M No. "E")	1.46	438.00		Page 331
61	100	Plates, offset positive 20" x 25 $\frac{1}{2}$ " (as "S-P", 3M)	5.00	500.00		"
62a	20	Ink (as van Son) Black - Mercantile, No. 19448 ( 5 lb. cans)	16.25	325.00		Page 378

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
62b	2	PMS Yellow No. 301	6.40	12.80		Page 379
c	2	PMS Red No. 302	7.35	14.70		"
d	2	PMS Blue No. 307	7.50	15.00		"
e	2	PMS White No. 309	4.45	13.35		"
63	5	Reducing Compound - No. 254 (1 lb. cans)	3.45	17.25		Page 365
64	3	Blanket (as DAYCO) ATF, 22 7/16" x 25 1/2" Pun, 3 Ply	24.60	73.80		"
65	2	Gloves, plastic disposable (100 per box)	3.45	6.90		Page 381
66	5	Roller Cleaner (1 lb. can)	4.35	21.75		"
67	5	Spray Powder (as Varin Non) regular ( 2 lb. container)	2.75	13.75		Page 386
68	2	Shop Towels (as Kendall) 17" x 18"	27.50	55.00		Page 786
69	4	Squeeze, plate - 9" (as Federal)	4.95	19.80		"
70	5	Sponges (as 3M) for developing pkg.	4.40	22.00		Page 349
71	4	Developer, R, 3M (Carton of 12, pint)	70.80	283.20		Page 336
72	2	Gum, R process (as 3M) ( 4 gal, carton)	57.20	114.40		"

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
73	2	Developer (as "S-P", 3M) (4 gal. carton)	61.20	122.40		Page 336
74	2	Fixer (as "S-P", 3M) (4 gal. carton)	81.40	162.80		"
75	2	Gum, positive (as 3M) (quart)	6.27	12.54		"
76	5	Fountain (as 3M) (gal.)	12.85	64.25		"
77	1	Transfer Diffusion Processor (as Goodkin Chemicals, GP-22)	395.00	395.00	Goodkins	

HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
<b>Typography (typesetting) Department</b>						
1	1	IBM Composer, Selectric with memory; English Keyboard	8,600	8,600	IBM	
		Fonts:				
	1	7 point Medium	20	20	"	
	1	8 " BOLD	20	20	"	
	1	11 " ITALIC	20	20	"	
	1	11 " BOLD	20	20	"	
	1	6 " Medium	20	20	"	
	1	6 " BOLD	20	20	"	
	1	12 " BOLD	20	20	"	
2	5	Reams - Typesetting paper for above composer	18	90	"	
3		Typemasters:			Addressograph/Multilith	Verityper Catalogue
	1 ea	Model Nos.:				
		C 3627	14	14		
		C 18-2426	14	14		
		C 36-26W	14	14		
		V 3662W	14	14		
		C 3064W	14	14		
		V 3097 W/L	14	14		
		V 4297 W/L	14	14		
		V 5497 W/L	14	14		
		C 30-112	14	14		
		V 30-126 W/L	14	14		
		V 30-210 W/L	14	14		

## HEALTH EDUCATION USE (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
<u>Typography Section</u>						
4	20	Printing Paper for Headliner No. 48/3100/0, rolls 100'	7.36	147.20	Addressograph-Multilith	
5	5	Printing film, for Headliner rolls, 50'	9.45	47.25	"	
6	10	Paper, rolls 8½" x 10½" for Savin Model 220 (2 per carton)	25.00	250.00	Savin New York	
7	25	Ribbons for above IBM Composer	5.00	125.00	IBM	

## HEALTH EDUCATION UNIT (TU) EQUIPMENT

PIO/C No. 615-161-9-70034

C-1

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
<b>Recording Department</b>						
1	1	Mixer (recording console QM-128) with input channels and 8 program mixing busses and options = 10-14	4,700.00	4,700.00	Quantum Audio Labs Inc. 105 Riverside Drive Glendale, Cal. 91201 Tel: 213-841-0970	
2a	1	Tape Deck, Ampex 700, No. 401024, 4 track	1,795.00	1,795.00	Ampex Corp. 401 Broadway MS 11-13 Redwood City, Cal. 94063 Tel: 415-367-4161	
2b	1	Rem. control No. 4010269	115.00	115.00	Ampex Corp.	
2c	1	Tape Deck, Ampex AG 440C	4,600.00	4,600.00	Ampex Corp.	
2d	1	Remote control	150.00	150.00	Ampex Corp.	
2e	1	Amplifier, AA-620	250.00	250.00	Ampex Corp.	
3	1	Turntable, transkription, 12" (as Model CB-1200 Harris/Gates)	225.00	225.00	Gates/Harris Harris Broadcast Products Div. 123 Hampshire Street Quincy, Ill. 62301	
4	1	Tonearm, stereo (as Model "Gray 303 Micro-Trak 12")	79.50	79.50	Gates/Harris	
5	2	Needle to above	5.00	10.00	Gates/Harris	
6	1	Amplifier, solid state limiting (as Model 1176LN by United Recording Electron. Indust.)	489.00	489.00	United Recording Electron. Industries (address not known)	Sonocraft 29 W. 36 Street New York, N.Y. 10018 Tel: 212-760-9300
7	1	Equalizer, Graphic 1/3 octave (as Model S27A by UREI)	660.00	660.00	UREI (as above)	(as above)

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
8	2	Speaker, monitor (as Model Sentry I by Electro-Voice) for wall mounting	180.00	360.00	Electro-Voice, Inc. 600 Cecil St. Buchanan, Mic. 4907	Harris Corp. Broadcast Product Div. 123 Hampshire St. Quincy, Ill. 62301 or Sonocraft 29 W. 36 St. New York, N.Y. 10018
9	1	Speaker, studio (as Model Sentry IV by Electro-Voice)	550.00	550.00	Electro-Voice	Sonocraft 29 W. 36 St. New York, N.Y. 10018
10	1	Mixer accessories: Phantom power for condenser mikes	150.00	150.00	Quantum Audio Labs, Inc. 1905 Riverside Drive Glendale, Cal. 91201 Tel: 213-841-0970	
11	1	Patchbay QM173 (to be included with 10, above)	825.00	825.00	(as above)	
12	1	Direct output capability for driving tape deck (to be included with 10, above)	100.00	100.00	(as above)	
13	1	Walnut cabinet	350.00	350.00	(as above)	
14	10	Patchcords (as Switchcraft TT-series Ring/Tip Sleeve phone jacks for patchbay item 11)	75.00	750.00	Switchcraft (address not known)	Sonocraft
15	1	Cassette copier (as Model "Cassette Copier 1" Telex Communications Inc.) expandable to 5 slaves (No. 11)	995.00	995.00	Telex Communications, Inc. 9600 Aldrich Ave. S. Minneapolis, Minn. 55420	
16	1	Noise reduction unit (as Dolby AN-400, 4 ch.)	350.00	350.00	Teac Corp. of Am. 7733 Telegraph Rd. Montebello, Cal. 90640	Sonocraft

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
17a	42	Cassette recorder, portable, 3-way power 50-1000 Hz, rechargable batteries, NiCad, input for line recording as Calipone AV 20)	81.14	3,407.88	Calipone	Sonocraft
17b	42	AC Adapter 220V to above	4.50	189.00	Calipone	Sonocraft
18	1	Microphone, ribbon 40-1500 Hz (as Shure Model 300, Studio gradient, bidirectional)	350.00	350.00	Shure Brothers 222 Hartrey Ave. Evanston, Ill. 60204	Factory
19	2	Microphone, dynamic (as Shure Model Unisphere I 566) 50-1500 Hz	180.00	360.00	Shure	Factory
20	3	Microphone, lavalier (as Shure Model SM11 with clip) 50-1500 Hz	100.00	300.00	Shure	Factory
21	1	Microphone, headworn with receiver (as Shure Model SM12)	90.00	90.00	Shure	Factory
22	2	Desk stand for mike (as Shure Model S39A)	15.00	30.00	Shure	Factory
23	2	Floor stand, mike (as Shure MS 10C)	16.00	32.00	Shure	Factory
24	2	Boom, for above mike stand (as Shure BB-44)	15.00	30.00	Shure	Factory
25	2	Cassette recorder, portable stereo, high quality Dolby, limiter, tape bias, 3-way power rechargable battery (as Sony TC-1535D)	280.00	560.00	Sony (Tokyo address)	Sonocraft

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
26a	2	Cassette recorder, portable, mono, high quality (as TC-142 by Sony)	180.00	360.00	Sony	
26b	4	NiCad batteries, BP-8 for TC-142-153	21.00	84.00	Sony	
27	4	Microphone, dynamic 80-1300 Hz (as Electro-Voice 635A)	60.00	240.00	Electro-Voice	Factory
28	4	Headphone, 20-2000 Hz (as Pickering Model OA-3 Dynamic)	40.00	160.00	Pickering & Co., Inc. 101 Sunny Side Blvd. Plainview, N.Y. 11830	
29	2	Eraser, tape, bulk (as Model HD 15 from Microtram)	14.50	29.00	Microtram 145 Mineola Ave. Walley Stream, N.Y. 11582	
30	2	Tape head demagnifier (as Model 40 M from Microtram)	7.45	14.90	Microtram	
31	1	Tape editing pen (as Model HD-35M from Microtram)	36.50	36.50	Microtram	
32	42	Cassette head demagnifier and cleaner (as Model R 36008 from Robins)	2.00	84.00	Robins Industries Co. 75 Austin Blvd. Commack, N.Y. 11725	
33	2	Tape splicer for cassettes (as Model R-33047 from Robins)	8.00	16.00	Robins Industries Co.	
34	2	Tape splicer for 1/4 inch tape (as R-19022 from Robins)	5.00	10.00	Robins Industries Co.	
35	50	Cassette albums for 12 cassettes (as Robins Model R-34004)	4.00	200.00	Robins Industries Co.	

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
36a	500	Cassettes C-30, low noise, screw, loose labels, plastic bores (from A.V. Tape Sales)	.56	280.00	A.V. Tape Sales P.O. Box 1082 Engelwood Cliff, N.J. 07632	Factory
36b	500	Cassettes C-90, low noise, same (A.V. Tape Sales)	.72	360.00	A.V. Tape Sales	Factory
37	100	Reel to Reel tape, low noise, 1800', cardboard box, 7" (A.V. Tape Sales)	1.56	156.00	A.V. Tape Sales	Factory
38	50	Reel to Reel tape, low noise, extra play, 10-1/2" metal reel (as Maxell)	16.10	805.00	Maxell Co. 130 W. Commercial Ave. Monachie, N.J. 07074	Any
39a	10	Endless loop cassettes (as TDK) EC-3	4.19	41.90	TDK Electronics Co. 755 East Gate Blvd. Garden City, N.Y. 11530	Any
39b	10	Endless loop cassettes (as TDK) EC-12	5.49	54.90	TDK Electronics Co.	Any
39c	10	Endless loop cassettes (as TDK) EC-20	3.99	39.90	TDK Electronics Co.	Any
39d	10	Endless loop cassettes (as TDK) EC-30	3.99	39.90	TDK Electronics Co.	Any
40	1	Audio cable, heavy duty, two conductor shielded cable 1000' (as Model 02882 from Comprehensive)	85.00	85.00	Comprehensive Northwale, N.J. 07647	

## HEALTH EDUCATION UNIT (EJ) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
41	1	Audio cable, standard center conductor 75 ohm (as Model RG 59U from Comprehensive) 1000' reel	110.00	110.00	Comprehensive	
42	2	Audio cord, speaker with different colored conductors (as Model 01360 from Comprehensive) 500' reel	21.00	42.00	Comprehensive	
43		Audio jacks and plugs:				
43a	20	Connector XLRP	1.93	38.60	Comprehensive	
43b	20	Connector XLRJ	2.25	45.00	Comprehensive	
43c	50	Connector RCA PP	.30	15.00	Comprehensive	
43d	30	Connector wall XLR P-CM	2.24	67.20	Comprehensive	
43e	35	Connector wall XLRJ-CM	3.59	125.65	Comprehensive	
44	4	Chair, arm, padded with casters (as 629 909)	67.95	271.80	Beckely-Cardy	
45a	1	Cabinet, storage, No. 300-418	98.95	98.95	Beckely-Cardy	
45b	1	Gooseneck for mixer mike (as Shure Model G-18CN)	29.00	29.00	Shure Brothers (see item No. 18)	
46	2	Case, microphone (as Halliburton 18x14x5 fibre, Model 30E)	52.00	104.00	Comprehensive or S.O.S.	
47a	1	Vacuum cleaner, Model R-869-0463	217.95	217.95	J.C. Penney	
47b	50	Dust bags (pkgs.) Model R-869-0398A	1.19	59.50	J.C. Penney	

HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
48a	1	Intercom, as Model IE-7A Bogen, Masterstation	56.25	56.25	Lear Sieger, Bogen	Sonocraft
48b	5	Remote RIE-1A	20.25	101.25		
59	1	Amplifier, lending (as Model LA-3A by UREI)	395.00	395.00		Sonocraft
50	1	Accessory Kit for above (as M.SR-3A)	15.00	15.00		Sonocraft
51	1 Set	Spares: Ampex 4406	300.00	300.00	Ampex	
52	1 Set	Spares: Ampex 700	300.00	300.00	Ampex	

## HEALTH EDUCATION (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
<u>Lecture Room - Auditorium</u>						
1	3	Projector 1,000 W, 16 mm (as Kalart Victor model 70-25 optical/magn.) 12" speaker Zoom lens to cover 10' screen from 10 yard distance	1,227.50	3,682.50	Kalart Victor P.O. Box 112 Hultenius Street Plainville, Ct. (203) 747-1663	
2	10	Spare lamps, 1,000 W for above projector	15.00	150.00		
3	1	Screen, Electrical (as model Junior Electrol 10'x10', matte white on fibreglass, with low voltage controls \$485 + \$136.70) 220V, 50 Hz.	721.00	721.00	Da-Lite Screen Co. 1319 Winona Avenue Warsaw, Utah	Audio-Visual Directory
4	1	Intercom (as Bogen 1E-13A Master Station)	72.25	72.25	Lear Siegler, Bogan Div. P.O. Box 500 Paramus, N.J. 07607	Sonocraft
	10	RIE-1A Remote	20.25	202.50		
5	2	Speakers (as Sentry 1, wall-mounted from Electro Voice)	180.00	360.00	Electro Voice	Sonocraft
6a	1	Slide projector to cover 10' from 10 yard distance, Carousel Kodak	580.00	580.00	Kodak	
6b	1	With Zoom lens to Model S-AV 2000	55.00	55.00	Kodak	
6c	1	Remote control	15.00	15.00	Kodak	
6d	1	Case	44.00	44.00	Kodak	
7	1	Amplifier (as Bogen Model BT-20A, 20 watts on 6-12 volts)	100.00	100.00	Kodak	

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
<u>Audio Visual Library</u>						
1	2	Storage cabinet, film (as WA 811006) double doors 29"x15"x66". Capacity 20 each, 4-6-800, 12-1600' reels	294.00	588.00	Victor Duncan 200 E. Ontario Chicago, Ill.	
2	4	Bench Lamp, tension spring (as Luxo Model LS101 grey) (FL811002)	29.50	118.00	"	
3	10	Cloth, polishing for film (as Filmagic, FM811002)	1.50	15.00	"	
4	1	Splicer (as Grijwold Model HMG NUG 807001)	37.00	37.00	"	
4b	1	Scraper to above splicer (NUG 807006)	7.25	7.25	"	
5	2	Film cement, pint cans, Kodak No. EK 811044	4.45	8.90	"	
6	1	Film cleaning system, EL 811001	45.50	45.50	"	
6b	2	Film cleaner, gallon, No. EL 811001	11.50	23.00	"	
7		Reels, plastic				
7a	50	400' PR 811012	.45	22.50	"	
7b	25	600' PR 811013	1.46	36.50		
7c	25	800' PR 811002	1.71	42.75		
7d	60	1,200' PR 811014	1.88	112.80		
7e	5	1,600' PR 811003	2.14	10.70		

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
<b>Audio Visual Library (continued)</b>						
8		Film cans, steel			Victor Duncan	
a	50	400' MO 811165	.97	48.50	200 E. Ontario	
b	25	600' MO 811166	2.37	59.29	Chicago, Ill.	
c	25	800' MO 811167	2.67	66.75		
d	60	1200' MO 811168	3.19	191.40		
e	5	1600' MO 811169	3.55	17.75		
9		Film Shipping Boxes			"	
a	50	400' REG 811273	5.25	262.50		
b	25	600' REG 811274	3.60	90.00		
c	25	800' REG 811276	3.82	95.50		
d	60	1200' REG 811280	4.72	283.20		
e	5	1600' REG 811284	4.95	24.75		
10	2	Plastic Leader Film, 16 mm, clear, single perf., 5X 800-299	14.25	28.50	"	
10b	1	Leader, double perf., SC 800-300	14.25	14.25	"	
11	2	Card Index System, 4x6, No. 644-369	6.75	13.50		Beckley-Cardy, p. 251
11b	2	Cards, ruled, box 4"x6" No. 171-199	5.99	11.98		"
11c	2	Index guides, Alphan., 4"x6"	2.15	4.30		"
12	24	Book supports, No. 228-460	1.05	25.20		"
13		Storage boxes, fibreboard				"
a	12	No. 174x177	1.09	13.08		"
b	12	No. 174x185	1.29	15.48		"
c	12	No. 174x193	1.39	16.68		"

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
<b>Audio Visual Library (continued)</b>						
14	25	Label sheets (file folder) (as 526-202, white)	.85	21.25		Beckley-Cardy, p.251
15	1	Storage Cabinet for filmstrip, tapes (as No. 916-860)	183.95	183.95		
16	1	Storage Cabinet, tapes, No. 633-149	141.95	141.95		"
17	1	Storage Cabinet, film, No. 917-161	137.95	137.95		"
18	1	Transparency maker, Gound volumes, single sheets (as 3M model 411)	392.00	392.00	3M Company	
19	10	Transparencies, lightweight clear, economy-line acetate, 100 per bot. for above transparency maker 3M	23.50	235.00	3M Company	
20.	2	Easels, display and presentation (as model Optivox Easel 1000 - 100)			Advance Products Co. P.O. Box 2178 Witicha, Kansas 67214	
a.		70" x 29", green chalk surface	69.95	139.90		
b.	2	as model Optivox (as 1000 - 200)	119.95	239.90		
		70" x 45", green chalk surface				
21	1	Super 8 Projector, silent, Bell & Howel or Kodak 220/50c reel to reel, with 2 extra 400' reels	200.00	200.00	Bell & Howel	
22	4	Projection lamp for above projector	4.00	16.00		

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
23	1	Repair kit (as Model 132 M-DP)	10.00	10.00	Bell & Howel	
24	1	8mm loop projector, silent (as Technicolor)	200.00	200.00	Technicolor, Inc.	
25	1	Desk Top Copier (as Nashua Model 1220)	2600.00	2600.00	Nashua Corp. Nashua, N.H. 03060	

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
<u>Audio-Visual Library - Field Outreach</u>						
1	7	16 mm Projectors with micro (as Bell & Howell Model No. 8302) with sound (with case)	557.00	3,899.00	Bell & Howell	
2	7	Spare lamps for above	8.00	56.00	Bell & Howell	
3	7	Generators (minimum 1500 W) 220V, 50 Hz (to be used for 16 mm and slide projector)	500.00	3,500.00	Onan 1400 73rd Ave., N.E. Minneapolis, Minn. 55432	
4	7	Slide Projectors, 220V and 12V (as TMC Model 150) (with case)	39.00	273.00	TMC Corp. 25 W. 45th St. N.Y., N.Y.	
5	14	Spare lamps: 12V	5.00	70.00	TMC Corp.	
6	14	Spare lamps: 200V	5.00	70.00	TMC Corp.	
7	7	Screen (as Da-Lite Model Versatol 60" x 60")	68.00	476.00	Da-Lite Corp.	
8	7	Carry case for above screen	6.00	42.00	Da-Lite Corp.	

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
<u>Audio-Visual Library (Training Aids)</u>						
<u>Slide/Cassette Sets:</u>						
1	1	Colombia: A variety of instructional media 77 slides, cassette, 10 min.	65.00	65.00	World Education 1414 Sixth Ave. New York, New York 10019	
2	1	Ethiopia: A new education in family life, 70 slides, cassette, 10 min.	65.00	65.00	"	
3	1	Listen....they are speaking, 120 slides, cassette, 25 booklets, 23 min.	75.00	75.00	"	
4	1	Partnership in learning, 80 slides, cassette, 25 booklets, 9 min.	65.00	65.00	"	
5	1	Philippines: "Self-Actualising" Education, 90 slides, cassette, 13 min.	65.00	65.00	"	
6	1	Understanding Human Reproduction (Part 1-3, 37 minutes)	45.00	45.00	Guidance Associates Pleasantville, N.Y. 10570	
7	1	Birth Control Methods (self-instructional program)	10.00	10.00	Educational Material Carolina Population Center University of North Carolina at Chapel Hill Chapel Hill, N.C. 27514	

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
		<u>Models:</u>				
8	2	Pelvic Model, soft plastic model	75.00	150.00	The Pathfinder 1330 Boylston St. Chestnut Hill, MA 02167	
9	1	Betsl, Model - Breast teaching model	250.00	250.00	Department of Education Services Ortho Pharmaceutical Corp. Raritan, N.Y. 08869	
		<u>Films:</u>				
10	1	Breast Self-Examination; A Plan for Survival, 16 mm, 10 min.	100.00	100.00	Maternity, Infant Care FP Project 377 Broadway N.Y., N.Y. 10013	
11	1	Pelvic Examination Procedures, 16 mm, 25 min.	447.00	447.00	Omni Education Division of Ortho Pharmaceutical Corp. 190 West Main St. Somerville, N.J. 08876	
12	1	IUD The CU-7, super 8 mm, 18 min.	80.00	80.00	Regional Training Center for Family Planning 100 Edgewood Ave., N.E. Atlanta, Ga. 30303	
13	1	Contraception, 16 mm, 23 min.	275.00	275.00	John Wiley & Sons, Inc. 605 3rd Ave. N.Y., N.Y. 10016	
14	1	The Menstrual Cycle, 16 mm, 12 min.	32.00	32.00	Eli Lilly Co., Film Library P.O. Box 618 Indianapolis, Ind. 46206	

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
15	1	Purposes of Family Planning, 16 mm, 15 min.	235.00	235.00	Oxford Film, Inc. 1136 North Las Palmas Ave.	
16	1	Human Reproduction (59 slides)	59.50	59.50	John Wiley & Sons	
17	1	Methods of Contraception (slides) 16 min.	75.00	75.00	National Health Films	
18	1	Talking About Contraception (slides) 12½ min.	75.00	75.00	Perennial Education 1825 Willow Rd. Northfield, Ill. 60093	

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
<u>Books - Training Library</u>			(Estimate)			
1.	10	Knowles M., Modern Book of Adult Education, Associate Press New York	10.00	100.00		
2.	10	Mathew Miles, Learning to Work in Groups, Teachers College Press, Teacher College Columbia Univ.	"	100.00		
8.	20	Joseph MacGrath, Social Psychology, Holt Rinehart and Winston New York	"	200.00		
9.	40	Robert Mager, Preparing Instructional objectives, Fearon	"	400.00		
10.	20	George S. Odiorne, Training by objectives, An Economic Approach to Management Training, Macmillan Company, Callier-Macmillan United London.	"	200.00		
11.	10	Holland J. & Skinner B.F., The Analysis of Behaviour, MacGraw Hill 1961 New York.	"	100.00		
12.	10	Gary A. Steiner & Bernard Berelson, Human Behaviour - An Inventory of Scientific Findings, Harcourt, Brace and World (1964)	"	100.00		
13.	10	A.H. Maslow, Motivation and Personality, Harper and Row (1954)	"	100.00		

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
<b>Books</b>			(Estimate)			
14.	10	The Organization Man, Doubleday, New York	10.00	100.00		
15.	20	M. Wertheimer, Productive Thinking, Harper and Row 1945 New York.	"	200.00		
16.	20	Robert L. Hilliard 2nd Ed., Writing for Television and Radio, Hastings House Publishers, N.Y. 10016	"	200.00		
17.	10	Paul F. Secord & Carl W. Social Psychology, McGraw-Hill Book Company, New York.	"	100.00		
18.	10	Cyril O Houle, The Design of Education, Jossey - Bass Inc. (1972) San Francisco London.	"	100.00		
19.	10	Harry J. Harley, Educational Planning, Programming, Budgeting, Prentice - Hall Englewood Cliff New Jersey (1969)	"	100.00		
20.	10	Alfred G. Smith, Communication and Culture, Holt Rinehart and Winston, New York (1969)	"	100.00		
21.	10.	J. Trenaman, Communication & Comprehension, Longmans London, (1967)	"	100.00		

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
			(Estimate)			
<u>Books</u>	10	Richard Beckhard, How to Plan and Conduct Workshops, Associated Press New York, (1955)	10.00	100.00		
23.	20	Theodore Caplow, Principles of Organization, Harcourt, Brace and World, New York (1964)	"	200.00		
24.	10	Daniel Kartz & Rober Kahn, The Social Psychology of Organizations, Willey, New York (1966).	"	100.00		
25.	10	Roland L. Warren, Studying the Community, Free Press, New York (1965)	"	100.00		
26.	30	Proshansky & Seidernberg, Basic Studies in Social Psychology, Holt, Rinehart and Winston New York.	"	300.00		
27.	1	Criteria for the selection and use of visuals in instruction. By Gropper, G.L. et all, 1971	19.95	19.95	Educational Technology Publications 140 Sylvan Avenue Englewood Cliff New Jersey. 07632	
28.	1	Diagnosis and Revision in the Development of instructional materials. By Gropper, G.L. 1975	13.95	13.95		
29.	1	Formative Instructional Product Evaluation: Instruments and Strategies	9.95	9.95		

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
			(Estimate)			
30.	1	Handbook and Catalog for Instructional Media Selection. By Boucher, P., Gohlieb M.J. and Morganlander, M.L.	12.95	12.95	Educational Technology Publications 140 Sylvan Avenue Englewood Cliff New Jersey, 07632	
31.	1	Instructional design By Briggs L.J. et all, 1977	15.95	15.95	"	
32.	1	Small-group teaching By Sharan, S. & Sharan, Y., 1976	13.95	13.95	"	
33.	3	Manual for training family planning nurse practioners	16.00	45.00	Emory University Regional Training Center 100 Edgewood Avenue N.E. Atlanta Georgia 30303	
34.	2	Words	1.00	2.00	"	
35.	2	Producing low-cost AV's	3.50	7.00	"	
36.	2	Training Resources 1. Structured experiences	1.00	2.00	"	
37.	2	Training Resources 2.	1.00	2.00	"	
38.	2	Informed consent for Family Planning. A training manual (August 1977).	2.50	5.00	"	

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
<b>Books - Technical Library</b>						
1		Ballinger, Raymond A, Layout and graphic design. New York: Van Nostrand Reinhold, 1970		(Estimate) \$10.00		
2.	1	Bockus, H. William Jr. Advertising graphics; a workbook and reference for the advertising artist. New York: Macmillan, 1969		"		
3.	1	Brown, James Wilson; Lewis, Richard B; and Harclerod, Fred F. Audiovisual instruction: media and methods. 3d ed. New York: McGraw-Hill, 1969.		"		
4.	1	Carlsen, Darvey E. Graphic arts. 4th ed. Peoria, Illinois: Charles A. Bennett, 1970.		"		
5.	1	Cogoli, John E. Photo-offset fundamentals. 2d ed. Bloomington, Illinois: McKnight & McKnight, 1967.		"		
6.	1	Dale, Edgar. Audiovisual methods in teaching 3d ed. New York: Dryden Press, 1969.		"		
7.	1	Eastman Kodak Company. Art-work size standards for projected visuals. Rochester, New York, 1965. (Technical pamphlet No. S-12)		"		
8.	1	Basic photography for the graphic arts Rochester, New York 1970. (Technical pamphlet No. Q-1)		"		

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
<u>Books</u>						
9	1	Kodak master darkroom dataguide. Rochester, New York, 1971. Technical pamphlet No. R-20)		(Estimate) \$10.00		
10.	1	Kodak materials for visual-communication education and training. Rochester, New York, 1971, (Technical pamphlet No.Q-2)		"		
11.	1	Producing slides and filmstrips. Rochester, New York, 1970. (Audio-visual data book No. S-8)		"		
12.	1	Ebok, Sidney C., and Chern, C.W. Operating audiovisual equipment. San Francisco: Chandler, 1968.		"		
13.	1	Erickson, Carlton W.H., and Curl David H. Fundamentals of teaching with audiovisual technology. 2d ed. New York: Macmillan, 1972.		"		
14.	1	Fabun, Don. Dimensions of change. Beverly Hills, California: Glencoe Press, 1971.		"		
15.	1	Gordon, George N. Classroom television; new frontiers in ITV 1st ed. New York: Hastings House, 1970.		"		
16.	1	Jones, Peter. The technique of the television cameraman 2d ed. New York: Hastings House, 1969.		"		

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
<u>Books</u>						
17.	1	Karch, Robert R., and Buber, Edward J. Graphic arts procedures: the offset processes; includes strike-on and film composition. Chicago: American Technical Society, 1967.		(Estimate) \$10.00		
18.	1	Larmore, Lewis. Introduction to photographic principles, 2d ed. New York: Dover Publications, 1965.		"		
19.	1	Laughton, Roy. TV graphics. New York: Reinhold, 1966.		"		
20.	1	McLuhan, Herbert Marshall. Understanding media, the extensions of man. New York: McGraw-Hill, 1966.		"		
21.	1	Madsen, Roy. Animated film; concepts, methods, uses. New York: Interland Publishing, and Pitman Publishing (distributors), 1969.		"		
22.	1	Meierhenry, Wesley C., editor. Media and educational innovation; authoritative papers on innovation by an inter-disciplinary team. Ann Arbor: University Microfilms, 1970 (Xerox facsimile)		"		
23.	1	Merril, Francis, Society and culture, New Jersey: Prentice-Hall, 1965.		"		
24.	1	Morlan, John E. Preparation of inexpensive teaching materials. San Francisco: Chandler Publishers (Intext Educational Publishers), 1972.		"		

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
<u>Books</u>						
25.	1	Oringel, Robert S. Audio control handbook for radio and television broadcasting. 4th ed. rev. and expanded. New York: Hastings House, 1972.		(Estimate) \$10.00		
26.	1	Parker, Norton S. Audiovisual script writing. New Brunswick: Rutgers University Press, 1968.		"		
27.	1	Reed, Robert Findley, What the printer should know about paper. (Complete revision of What the lithographer should know about paper, first published in 1949). Pittsburgh: Graphic Arts Technical Foundation, 1970.		"		
28.	1	Rose, Robert. Sociology: the study of human relations. New York: Alfred A. Knopf, 1967.		"		
29.	1	Rossi, Peter H., and Biddle, Bruce J., editors. The new media and education; their impact on society		"		
30.	1	Shapiro, Charles, and Sonderstom, Walter E. The lithographers manual, 4th ed. Edited by Victor Strauss. Pittsburgh: Graphic Arts Technical Foundation, 1968.		"		
31.	1	Silver, GERAL A. Modern graphic arts paste-up Chicago: American Technical Society, 1966.		"		

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
<u>Books</u>						
32.	1	Stone, Bernard, and Eckstein, Arthur. Preparing art for printing. New York: Reinhold, 1965.		(Estimate) \$10.00		
33.	1	Wilkie, Bernard. The Technique of special effects in television. New York: Hastings House, 1971.		"		
34.	1	Willis, Edgar E. Writing television and radio programs. New York: Holt, Rinehart and Winston, 1967.		"		
35.	1	Wyman, Raymond. Mediaware - selection operation and maintenance, Dubuque, Iowa: William C. Brown, 1969.		"		
36.	1	Zetzl, Herbert, Television production handbook. 2d ed. Belmont, California: Wadsworth, 1968.		"		

## HEALTH EDUCATION UNIT (U) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
<u>Photo Department</u>						
1	1	Dry mounting press 220/50 d. (as Model Commercial 200, 18½ x 23" from Seal Mc.)	420.00	420.00	Seal Inc. 550 Spring Street Naugatuck CT 06770 (203 729 5201)	
2a	1	Electronic Flash (as Sunpak Auto, 511)	80.00	80.00	Competitive Camera 157 W. 30th New York (212-868-9175)	
2b	2	Spare connecting cord	4.00	8.00	Competitive Camera	
2c	1	Electronic Flash, pro- fessional, (as Sunpak Auto 611)	129.00	129.00	Competitive Camera	
2d	2	Spare Connecting Cord	4.00	8.00	Competitive Camera	
2e	2	Electronic Flash Battery (as Eveready 497-510V)	22.00	44.00	Competitive Camera	
2f	2	Flash Battery (as Mallory PF-491, 240V)	12.00	24.00	Competitive Camera	
3a	25	Hanging Folders, Legal size No. 317-842	5.79	144.75	Berkley - Cardy	
3b	10	Hanging File Frame, legal size	2.49	24.90		
4a	2000	Negative files, sheets for 35 mm films	0.02	40.00		Braum N. America Page 274 in PTN Photographic trad news
4b	2000	Sheets for 120 size film	0.02	40.00		

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
5a	3	Western film loader 100' capacity	6.95	20.85	B & H 17 Warren Street New York, N.Y. (212 233-9191)	
5b	15	Substitute magazine (as Kodak Snap-Cap)	4.00	60.00	Kodak	
6	3	Seamless Paper, Polecat 107" x 36", white, black, blue	15.95	47.85		Brewater Corp. Pg. 121 PTM Photographer Trade News
7	1	Photo light umbrella 40" (as Fatalite No. UBS 40/100/3)	32.95	32.95	Executive Photo 884 6th Avenue New York, N.Y.	
8	1	Copyboard, proofer, (as Paterson "Pro- Proofer & Copyboard")	24.95	24.95		PTM Trade News Page 380
9a	25	Carousell slide trays 80	3.10	97.50	Kodak	
9b	10	Slide clip set (12)	12.95	129.50	Kodak	
9c	3	Stack loader	14.50	43.50	Kodak	
10		Filter, Color compensating gelatin square 3"			Kodak	
10a	1	No. CC025Y - 170 4121	2.90	2.90	Kodak	
10b	1	No. CC10R - 149 6710	2.90	2.90		
10c	1	No. CC10G - 149 6595	2.90	2.90		
10d	1	No. CC40G - 149 6629	2.90	2.90		

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
10e	1	No. CC10B - 149 6470	2.90	2.90	Kodak	
10f	1	No. CC40B - 149 6504	2.90	2.90	Kodak	
11	5	Masking Sheet (100 pg.) 20 3/16 x 25 1/2 (as No. ATF 24)	21.65	108.25	Baseline Inc.	General Page 323
12	3	Flash Sunpak No. Auto 301	35.00	105.00	B & H 17 Warren Street New York, N.Y.	
13	2	Lens Cleaning Kit (as Kalt Kit, Tissues, blower, brush)	3.95	7.90		General 227
14		Trays, As Kodak				
14a	3	Duaflex No. 140 8814	5.00	15.00	Kodak	
14b	3	Duaflex No. 140 6633	8.00	24.00	Kodak	
14c	3	Duaflex No. 140 6799	28.00	84.00	Kodak	
14d	1	Duaflex No. 140 5547(6")	60.00	60.00	Kodak	
15	3	Film Clip, Kodak No. 149 2594 (10 pg.)	8.00	24.00	Kodak	
16	2	Rubber Squeegee (as Kodak No. 147 7249)	8.00	16.00	Kodak	
17	5	Film processing tongs stainless steel with springs(as Prinz No. 260-10)	1.50	7.50	Prinz	General Page 482

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
18	1	Editor viewer, slide to table top, plastic, 50 slide capacity, 15W (as No. 40)	100.00	100.00		Matrix System Ltd, (Lecdal Mc) Pg, 320
18a	1	Overlay for above	13.00	13.00		
19a	1	Polaroid "Onestep"	28.50	28.50	B & H 17 Warren Street New York, N.Y.	
19b	25	Polaroid Black & White film	4.00	100.00	B & H	
19c	25	Polaroid Color cartridge SX 70	5.50	132.50	B & H	
19d	25	10 shot flashbars	3.50	87.50	B & H	
20a	1	Print trimmer (as Model Falcon)	19.95	19.95	Falcon Safety Prod. Mc. Mountainside New York, N.Y. 07092	
20b	25	Single edge razor blades for above	.30	7.50	Falcon Safety	
21		Paper safes, (as Unitron Papermatic)			Ehrenreich Woodbury New York 11797	
21a	2	For 100 sheet 8" x 10"	12.50	25.00	Ehrenreich	
21b	2	For 100 sheet 11" x 14"	14.50	29.00	Ehrenreich	
22		35 MM film as Kodak			Kodak	
22a	10	Plus X 100' B&W (164 2263)	12.00	120.00	Kodak	

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
22b	10	TriX 100' B&W (146 9188)	12.00	120.00	Kodak	
23		120 size film as Kodak:			Kodak	
23a	20	120 plus-X Per-pack of 5 rolls No.167 4456	6.00	120.00	Kodak	
23b	5	120 Tri-X/Pkg of 20 rolls (147 0186)	1.00	100.00	Kodak	
24		Color 35 MM film:			Kodak	
24b	60	Ektachrome 200 (135-20) (160 1582)	3.00	180.00	Kodak	
24c	60	Kodachrome 64 (135-20) (155 9954)	2.25	135.00	Kodak	
25		Developer, B&W Negative as Kodak D 76 size			Kodak	
25a	40	Gallon No.146 4817	1.50	60.00	Kodak	
25b	20	Replenisher D FAR(g) No.146 4833	1.50	30.00	Kodak	
25c	20	Microdol (gallon) No. 196 9724	2.50	50.00	Kodak	
26		Developer, Paper as:				
26a	40	Kodak Dektol (gal) No. 146 4726	1.50	60.00	Kodak	
26b	10	Kodak Ektosol Developer (gal) No. 146 4668	1.20	12.00	Kodak	

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
27		Fixing Bath, as Kodak Fixer (Powder):				
27a	80	Gallons (F-5 type) No. 197 1746	1.25	100.00	Kodak	
28	6	Developing Kit Color E-6 No. 156 6538	16.00	96.00	Kodak	
29	1	Safe light-rectangular	15.00	15.00	Kodak	
30	3	Safety filters, 1A, OC, OO	3.00	9.00	Kodak	
31	25	Developer, Kodalith Powder to make 2 gallons No. 146 5152	2.14	53.50	Kodak	
32		Enlarging paper as Kodak "Kodabromide" single weight:			Kodak	
32a	5 pkg.	F1 No. 143 6054, 8 x 10	18.00	90.00	Kodak	
32b	5	F2 No. 143 6732, 8 x 10	18.00	90.00	Kodak	
32c	10	F3 No. 143 7516, 8 x 10	18.00	180.00	Kodak	
32d	10	F4 No. 143 8233, 8 x 10	18.00	180.00	Kodak	
32e	5	F5 No. 143 8811, 8 x 10	18.00	70.00	Kodak	
33		Enlarging paper as Kodak "Kodabromide" single weight:				
33a	5	F1 No. 143 6146, 11x14	17.00	85.00	Kodak	
33b	5	F2 No. 143 6849, 11x14	17.00	85.00	Kodak	
33c	10	F3 No. 143 7615, 11x14	17.00	17.00	Kodak	

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
33d	10	F4 No. 143 8332, 11x14	17.00	170.00	Kodak	
33e	5	F5 No. 143 8860, 11x14	17.00	85.00	Kodak	
34		Contact paper as Ektamatic S.W. 11x14:				
34a	10	No. 192 2525(50 sheet)	18.00	180.00	Kodak	
35		Mural Paper, Kodak:				
35a	1	No. 143 3663, 42"x30'	32.00	32.00	Kodak	
35b	1	No. 143 3598, 42"x30'	32.00	32.00	Kodak	
36	2	Case, Camera Halliburton, Model 201	55.00	110.00		Executive Photo
37	1	Tripod (as D-26 Professional)	47.50	47.50		Executive Photo
38	1	Ashia Pentax MX with 55 MM lens	290.00	290.00		Executive Photo
39a	1	Rotary drum dryer Prinz "Jet Automatic"	284.50	284.50	Printz	Photographer Trade News
39b	1	Apron	26.25	26.25		Photographer Trade News
39c	1	Motor	56.75	56.75		Photographer Trade News
39d	1	Brush	8.25	8.25		Photographer Trade News
40	1	Copy stand (as CS/5)	49.95	49.95		Executive Photo Pg. 29
41	1	Copy light (as No.23-4)	19.50	19.50		
42	1	Umbrella White Fotolite No. UBW-40/100/3	26.95	26.95		Executive Photo Pg. 29

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
43	10	Photo Chemical Containers (C-6893) (gallon)	4.10	41.00	Flasher	
44	45 ft.	Floor mat, antifatigue 1/2 role of 90' (as M-0510)	6.00	270.00		Flasher
45	2	Lens Tissue (pkgs.) (as T-4008)	4.95	9.90		Flasher
46	100	Verichrome Pan Film (Rolls) No. 120	1.00	100.00	Kodak	

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
<b>Art and Graphic Art Department</b>						
1	1	Drawing Board Projector	365.00	365.00	Arthur Brown & Bros. Inc. 2 West 46th Street New York, New York 10036	
2	1	Head to airbrush (as 038078-VLM-1 multiple head)	30.00	30.00	Paashe Airbrush Co. 1909 W. Diversey Park Way Chicago, Illinois 60614	
3	1	Drawing table, parallel bar 53" x 36"	110.00	110.00	Any art supply house	
4	4	Rubber cement: gallon (as / 819-508)	6.30	25.20	Beckely - Cardy	
5	4	Empty bottle, for rubber cement, with dispensing brush (as 179-168)	2.85	11.40	Beckely - Cardy	
6	240	Poster Boards (as 826-537 Satin) 14 ply	.79	189.60	Beckely - Cardy	
7		Poster Boards:				
7a	24	Orange 929-786	.95	22.80	Beckely - Cardy	
7b	24	Green 826-511	.95	22.80	Beckely - Cardy	
7c	24	Yellow 826-545	.95	22.80	Beckely - Cardy	
7d	24	Black 929-794	.95	22.80	Beckely - Cardy	
7e	24	Red 826-529	.95	22.80	Beckely - Cardy	
8a	150	Illustration Board, white 174-771	.45	67.50	Beckely - Cardy	
8b	50	Illustration Board, Black 174-821	.45	22.50	Beckely - Cardy	

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
8c	50	Illustration Board, Blue 174-797	.45	22.50	Beckely - Cardy	
8d	50	Illustration Board, Orange 929-943	.45	22.50	Beckely - Cardy	
8e	50	Illustration Board, Green 174-805	.45	22.50	Beckely - Cardy	
8f	50	Illustration Board, Red 174-839	.45	22.50	Beckely - Cardy	
8g	50	Illustration Board, Yellow 929-950	.45	22.50	Beckely - Cardy	
9	10	Masking Tape (as 179-895 12 rolls/pak 3" core)	10.99	109.90	Beckely - Cardy	
10	25	Magic Transp. Tape (as 814-012)	1.29	32.25	Beckely - Cardy	
11	3	Dispenser (as 929-099 two roll heavy duty)	16.45	49.35	Beckely - Cardy	
12	2	Drawing ink, waterproof Higgins Quarter bottle (as 168-625)	12.95	25.90	Beckely - Cardy	
13a	4	Triangle, Styrene 30/60 (as 180-034)	.46	1.84	Beckely - Cardy	
13b	4	Triangle, Styrene 45/90 (as 180-059)	.60	2.40	Beckely - Cardy	
14	5	Tracing Paper, Rolls (as 174-664)	1.75	8.75	Beckely - Cardy	

## HEALTH EDUCATION UNIT (EU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
15	5	Cellophane roll (as 952-200)	1.75	8.75	Beckely - Cardy	
16	72	Crayons, water, 12 color set, 1 case (as 505-008)	1.45	104.40	Beckely - Cardy	
17		Vinyl Letters: All 16 nos.				
17a	12	4 of 1/2 inch	.79	37.92	Beckely - Cardy	
17b	12	4 of 1 inch	.79	37.92	Beckely - Cardy	
17c	12	4 of 2 inch	.99	47.59	Beckely - Cardy	
17d	12	4 of 3 inch  (as 644-203 to 534)	1.98	95.04	Beckely - Cardy	
18	12	Knife, (as X-Actor 657-601)	.75	9.00	Beckely - Cardy	
19	50	Blade to Knife X-Actor No. 11 Cat. 657-619, pack of 5	.59	29.50	Beckely - Cardy	
20		Statistical and Symbol Tapes:				
20a	3	No. TD 447C	1.65	4.95	Chart Pak, Avery Products Corp. Graphics Division 2620 Sa Susan Street Santa Ana, California 92704	
20b	3	No. TD 448C	1.65	4.95		
20c	3	No. TD 452A	1.35	4.05		
20d	3	No. TD 4551A	1.35	4.05		
20e	3	No. TD 453A	1.35	4.05		
20f	3	No. TD 454A	1.35	4.05		

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost	Total Cost (\$)	Manufacturer	Catalogue
21		Mechanical Prod. Tapes:				
21a	3	No. TD 410	1.55	4.65	Chart Pak, Avery Products Corp. Graphics Division 2620 Sa Susan Street Santa Ana, California 92704	
21b	3	No. TD 414	1.45	4.35		
21c	3	No. TD 488A	1.25	3.75		
22		Color Tapes, Gloss Surface:				
22a	3	No. 6201	.70	2.10	Chart Pak, Avery Products Corp. Graphics Division 2620 Sa Susan Street Santa Ana, California 92704	
22b	3	No. 6203	.70	2.10		
22c	3	No. 6205	.70	2.10		
22d	3	No. 6207	.70	2.10		
23	10	Letraset, letraline register marks in dispenser (as 1501-1/2 x 324, 12.7 mm)	3.00	30.00	Letrast USA 33 New Bridge Road Bergenfield, N.Y. 07261	
24	1	Pen Set (as Rapidograph penset Manfg. No. 3065HR-8)	50.00	50.00	Any Art Shop	
25	1	Cleaning Machine (as Rapidograph Illstrasonic Cleaner)	85.00	85.00	Any Art Shop	
26	2	Stool, All Purpose (as 301-275)(upholstered seat and back)	30.45	60.90	Beckely - Cardy	
27	1	Acetate Sheets (pkg.) OX 709066	29.00	29.00	V. Duncan 200 E. Ontario Chicago, Illinois (page 197)	

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
<u>Workshop and Maintenance Department</u>						
1a	1	12" Jointer (as General, Model No. 780)	1,870.00	1,870.00	General Mfg.	Brodhead-Garrett 1976-77 Edition, Page 57
1b	1	Extra set (3) H.S. Knives (1/8" x 31/32" x 12") (as No. 7803)	42.00	42.00	"	
1c	1	Knife Setting Gauge (as No. 7833)	71.40	71.40	"	
2a	1	Band Saw and stand, 14 inch, cast iron	429.00	429.00	J.C. Penney	
2b	10	Sawblades, 3/16 inch	6.49	64.90	J.C. Penney	
2c	1	Motor to above 1/2 Hp (as No. R-842-0069A)	89.99	89.99	J.C. Penney	
3	2	Machine Drill, heavy duty (as J.C. Penney R952-1527, singlephase, floor model 7/10 Hp motor)	329.00	658.00	J.C. Penney	
4a	2	Saw Sabre, hand, heavy duty (as No. R-951-1163)	42.49	84.98	J.C. Penney	
4b	10	Blades (R-951-0785A)	5.99	59.90	J.C. Penney	
4c	1	Drill, hand for plastic, wood and light metals (as J.C. Penny R-951-0785A)	29.49	29.49	J.C. Penney	
5a	1	Welding Unit, heavy duty (as No. R-842-0002)	149.99	149.99	J.C. Penney	
5b	1	Wheel to unit (as R-842-1356A)	8.99	8.99	J.C. Penney	

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
5c	10	Welding rods (R-951-0439A)	6.99	69.99	J.C. Penney	
5d	3	Goggles, dust (as 9G 18593 from Sears)	2.99	8.97	Sears	
6a	1	Sander, belt, heavy duty (as J.C. Penney No. R-951-4795A)	74.95	74.95	J.C. Penney	
6b	50	Belts, 3" x 2"	1.50	75.00	J.C. Penney	
7	1	Grinder, two sided (as Sears 9G 1936L)	149.00	149.00	Sears	Catalogue, page 860
8a	1	Planer, power (as R-952-1832A, $\frac{1}{2}$ Hp, 6 Amp)	49.99	49.99	J.C. Penney	Catalogue, page 881
8b	20	Replacement blade set R-951-5602A	2.49	49.80	J.C. Penney	
9	4	Anvil, light duty (as Sears No. 9G 5173)	15.95	63.96	Sears	Catalogue, page 868
10a	2	Hand tools: Plane (as 9G 37064)	17.99	35.98	Sears	Catalogue, page 869
10b	4	Hand tools: Sparecutters	5.00	20.00	Sears	
11a	4	Hammers/carpentry nails (as No. 9G 3824)	12.90	51.60	Sears	Catalogue, page 868
11b	4	Hammers/ball point (as No. 9G 38475)	8.01	32.04	Sears	
12a	4	Saw, cross cut (as No. 9G 36194C)	14.95	59.80	Sears	Catalogue, page 868
12b	1	Saw, Mitre No. R954-3711A	59.99	59.99	J.C. Penney	Catalogue, page 893
13	2	Screwdrivers (set as No. 9G 41081)	48.88	97.76	Sears	Catalogue, page 869

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
14	3	Chisels, wood (as No. 9G 36826)	13.97	41.91	Sears	Catalogue, page 868
15	4	Pliers (as No. 9G 45081)	5.10	20.40	Sears	
16	2	Glass cutter kit No. 21G 61701	4.49	8.98	Sears	
17a	2	Soldering iron (as No. R-952-3531A)	18.99	37.98	J.C. Penney	Catalogue, page 889
17b	1	Transformer for above (100 Watt)	20.00	20.00	Any	Off the shelf item
18	1	Vice, heavy duty (No. 9G 5188C)	44.50	44.50	Sears	Catalogue, page 866
19	4	Square, metal carpenter	7.50	30.00	Any	Off the shelf item
20a	2	Levels, spirit, 18" No. 9G 39823	4.49	8.98	Sears	
20b	2	24" No. 9G 39924	8.54	17.08	Sears	
21	4	Measuring tape, 100 ft. No. 9G 39002	12.99	49.16	Sears	Catalogue, page 865
22	4	Foot ruler, carpenters, 2' of box wood	2.00	8.00		Off the shelf item
23	4	Steel tape, 10', No. 9G 39213	5.76	23.04	Sears	Catalogue, page 865
24	5	Epoxy concrete enamel, color - Spring Moss (as No. 30-G-55595C) (Gallons)	16.99	84.95	Sears	Catalogue, page 932
25	1	Vacuum cleaner (as J.C. Penney Wet/Dry Shop Vacs, 10 gal., No. R-842-1218A)	49.99	49.99	J.C. Penney	Catalogue, page 833

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
<b>Preventive Maintenance Department Electronic Section</b>						
1	2	Toolkits for electr. repair (one JTK-27 plus one JTK-37) including 130 tools, a volt-ohm-milliammeter, 3" oscilloscope	770.00 483.00	770.00 483.00	Jensens Tools and Alloys 4117 N. 44th St. Phoenix, Arizona 85018	
2	1	Transistor tester (as Model 520B by K-precision, Dynascan) also testing diodes, SCR's and FET's	160.00	160.00		Comprehensive Northvale, N.J. 07647
3	1	Cable tester	31.35	31.35	Sescom, Inc. P.O. Box 590 Sardena, Ca. 90247	Comprehensive
4	1	Solid State, power supply (as P-6065) 220AC-0-30V	79.95	79.95	Flasher National Camera 2000 W. Union Ave. Englewood, Ca. 80110	
5	1	Chair (as C-2100)	47.50	47.50	Flasher	
6a	6	Contact cleaner, CVS-230	4.59	27.54	Flasher	Comprehensive
6b	12	Cleaner, glass plast., CVS-260	3.49	41.88	Flasher	
6c	2	Dust off gun, FG	13.99	27.98	Flasher	
6d	Case	Case and refill case of 12, FG	28.44	28.44	Flasher	
6e	1	Cotton swabs 12 puck, CVS-502	22.92	22.92	Flasher	

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
7	1	AVCON-1 Audio connector kit	85.00	85.00		Comprehensive
8	1	Audio cable, microphone (as Model 02882 from Comprehensive) 500' reel	38.20	38.20		Comprehensive
9	1	Audio cable, connection (as Model RG 59 U from Comprehensive) 500' reel	49.50	49.50		Comprehensive
10	4	Audio cable, speaker (as Model 01360 from Comprehensive) 500' reel	21.00	84.00		Comprehensive
11	10	Audio cable with RCA connectors (as SPP-SPP-C from Comprehensive)	3.41	34.10		Comprehensive
12		Audio connectors:				
12a	100	(as: Phono (RCA) plug (PP))	.30	30.00		Comprehensive
12b	50	(as: Phono (RCA) jack)	.35	17.50		Comprehensive
12c	20	(as: XLR plug (XLRP))	1.93	38.60		Comprehensive
12d	20	(as: XLR jack (XLRJ))	2.25	45.00		Comprehensive
13	2	Metric screw, nut washer assortment (as No. 0-7006)	14.95	29.90	Flasher	
14	10	Insulating tape, vinyl (as T-0243)	1.25	12.50	Flasher	
15	2	Bench mate (as -0360) shelves plus 20 dust free drawers	16.99	33.98	Flasher	

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cos. (\$)	Total Cost (\$)	Manufacturer	Catalogue
16	1	Bell & Howell projector, repair and service kit with complete set of circuit diagrams of existing models, see list No. 640-1552 TQ	230.00	230.00	Bell & Howell	
17		Transformers:				Off the shelf items
17a	5	250 Watt	25.00	125.00		
17b	10	500 Watt	50.00	500.00		
17c	5	1000 Watt	100.00	500.00		
17d	2	2000 Watt	150.00	300.00		
18	5	Anti corrosion spray (as VD-40) No. L-6481	2.15	10.75	Flasher	
19	5	Double piston epoxy, No. E-5435	1.75	8.75	Flasher	
20	5	Plastic steel, No. C-6853	1.20	6.00	Flasher	
21	2	Stainless steel spray, No. C-5105	5.39	10.78	Flasher	
22	2	Loosening spray, anti-corrosion spray (as No. L-6522)	2.75	5.50	Flasher	
23	5	Liquid tape (as No. T-0270)	1.75	8.75	Flasher	
24	1	Lube kit, complete (as K-3505)	16.25	16.25	Flasher	
25	2	Solder remover, No. R-1620	1.80	3.60	Flasher	

PIO/C No. 615-161-9-70034

M-4

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (¢)	Total Cost (\$)	Manufacturer	Catalogue
26	1	Tips to solder remover, No. T-3840	.90	.90		
27	2	Plastic repair kit, No. K-3610 LG	8.00	16.00		

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
<b>Distribution and Diffusion Department</b>						
<b>Distribution</b>						
1	1	Addressing system (as Model 24)	925.00	925.00	Scriptomatic 2030 Upland Way Philadelphia, Pa. 19131	
2	10	Cards, box of 1,000 (as Scriptomaster)	7.00	70.00	Scriptomatic	
3	1	Storage box for cards	18.00	18.00	Scriptomatic	
4	5	Duplicating fluid (gallons)	2.49	12.45	Scriptomatic	

HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
<b>CC Television Department (Training)</b>						
1	2	Video tape recorder, including: accessories: as Sony AV-3420CE; AC 3420CE, battery charger; BP-20A, battery pack; - , camera cable; CE 3, earphone; - , splicing tape; - , cleaning set; VMC-1M, cable, monitor; RH-1M, entry reel shoulder bag; V-600, video tape	762.71	1,525.42	Sony - Tokyo	
2	2	Battery cord as DCC-2400	12.88	25.76	"	
3	2	Adapter, allowing the use of a TV set, as RFU-53CE	47.45	94.90	"	
4	2	Battery pack, spare	37.29	74.58	"	
5	20	1/2' tape, high density (as V-60H) (30 min.)	8.47	169.40	Scotch brand - 12.38 No. 361-1/2-1200-R-148B (Comprehensive)	} As for items 5 & 6
6	1	Reel (1 carton of 5) (as RH-5E(H))	2.20	2.20	Scotch reel - 3.20 No. R148B-1/2-5 1/8 1 carton of 5 = 9.60	
7	2	Cord (as CCD-5-10W)	14.24	28.48	Sony	
8	1	Video recorder for editing (as Sony AV-3670CE) including: tape, reel, cord AC, splicing tape, oil, cleaning set	874.58	874.58	Sony	

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
9	1	Camera adaptor (as Sony CMA-3CE)	86.44	86.44	Sony	
10	1	Sync. generator (as CG-3CE)	138.98	138.98	Sony	
11	1	Connecting cord (as Sony CCF-10)	9.49	9.49	Sony	
12	2	Video camera (as Sony AVC-3450CE) including: shoulder strap camera grip; zoom lens - VCL-1206, F1.8, 12.2-75 mm	454.24	908.48	Sony	
13	2	Carrying case, camera (as Halliburton, fibre, No. 30E)	52.00	104.00	S.O.S. or Comprehensive	
14	1	Close-up lens (as Tamaron No. 49 CL-UP No. 2)	4.75	9.50	Sony	
15	2	Cable, camera ext. (as Sony CCJ-10)	42.37	84.74	Sony	
16	1	Monopod (as Sony VCT-1)	8.14	8.14	Sony	
17	3	Elevator tripod (as Sony VCT-1)	32.54	97.62	Sony	} Also from Comprehensive No. 4-735007F & No. 4-76010 \$735.00
18	3	Dolly (for tripod) Sony TD-3	46.46	139.38	Sony	
19	3	Microphone EV-635A	60.00	180.00	Sony	
20	2	Monitor (as Sony CVM-112UN) including earphone, loop, aerial AN-8, connecting cable, VMC-1.5P	194.92	389.84	Sony	

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
21	1	Recorder (as Sony AV 3670CE)	874.58	874.58	Sony	
22	2	Cameras for studio use (as Sony AVC 3250CES) with viewfinder	800.00	1,600.00	Sony	
23	1	Monitor, assembly of four (as Sony 18" rack mount PVM 400CE)	600.00	600.00	Sony	
24	1	Monitor, studio 11' (as Sony PVM-90CE)	250.00	250.00	Sony	
25	1	Monitor, studio 20" (as Sony PVM-200CE)	350.00	350.00	Sony	
26	1	Special Effect Generator (as Sony SEG-2CE)	700.00	700.00	Sony	
27	4	Cables (as VMC-10P, VMC-25P, VMC-1M, VMC-1N)	10.00	40.00	Sony	
28	1	Radio Frequency Unit (as Sony RFU-53CE/54R)	47.50	47.50	Sony	
29	4	Cables (as CCF-25)	49.00	194.00	Sony	
30	1	Video-audio distributor (as Sony DA-200E)	180.00	180.00	Sony	
31	1	Intercommunication system with 4 headset (as TV-systems Model No. 52 AV-310)	137.00	137.00	Comprehensive	
32	4	Intercom cable 32' (as No. IIC cable)	20.00	80.00	Comprehensive	
33	1	Microphone mixer (as Shure M67)	323.00	323.00	Shure	

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
	1	TV wall mount (as Model 900)	81.00	81.00	Sonocraft	
35	1	Editing console, wheels (as Model 900)	755.00	755.00	Comprehensive	
36	8	Chassis boxes (as Model "Senes DW-12", 4x11")	20.00	160.00	Comprehensive	
37	1	Cable, audio 19 pair twisted (as Belden No. 8769, 100 feet reel)	95.00	95.00	Tri-Com Productions Hilton Head Island South Carolina	
38	4	38-pin (as AMP 205843-1 male; No. AMP 205202-4)	15.00	60.00	Tri-Com Productions	
39	4	38-pin (as AMP 205842-1 female; No. AMP 205201-5)	18.00	72.00	Tri-Com Productions	
40	2	Cables (as CCF-5)	15.00	30.00	Sony	

Note: 1. For the above equipment, only CCIR System, 220 volt, 50 Hz, acceptable.

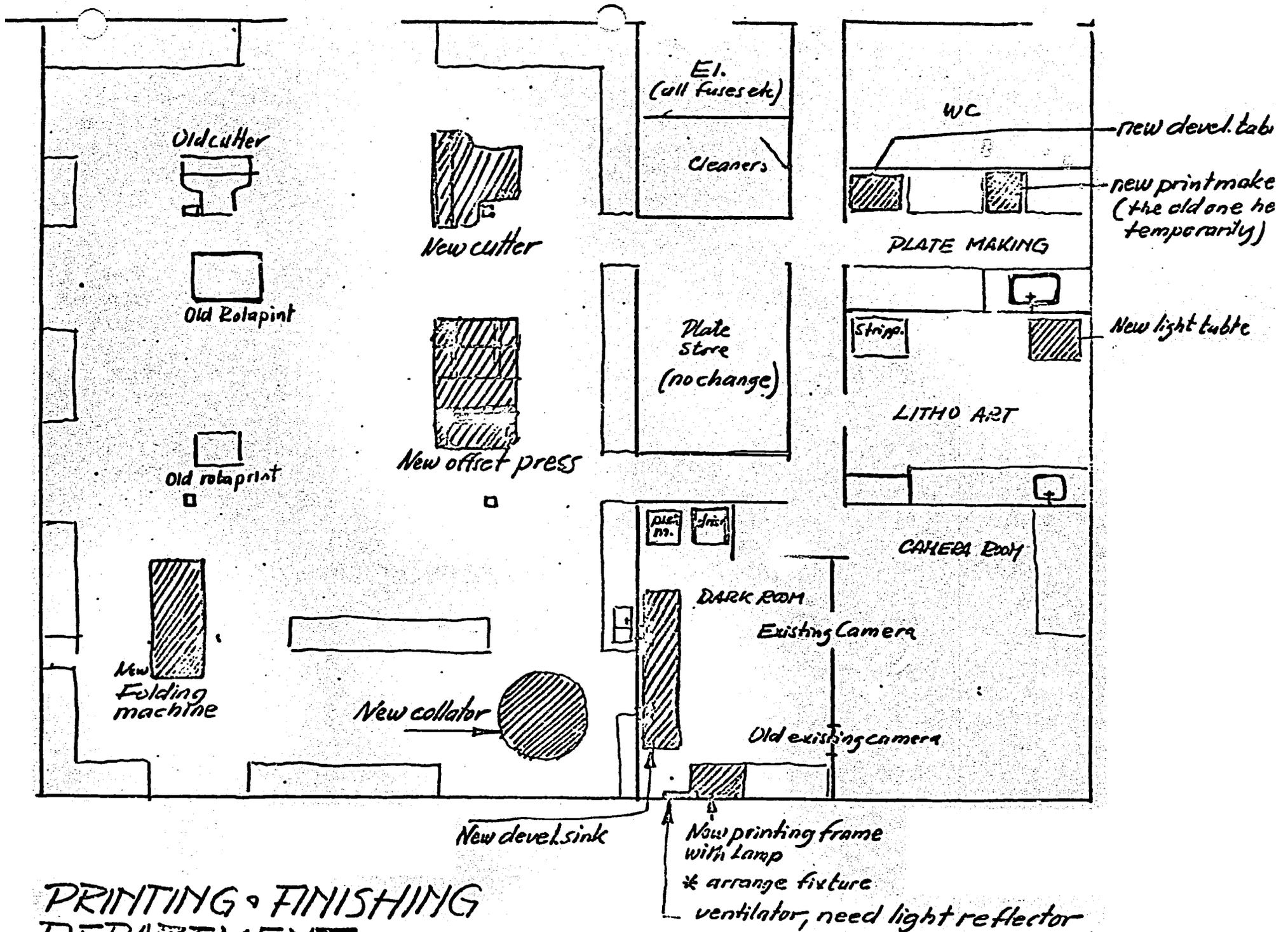
2. All prices this section are current UNICEF prices.

## HEALTH EDUCATION UNIT (HEU) EQUIPMENT

Item No.	Quantity (Units)	Description/Specification	Unit Cost (\$)	Total Cost (\$)	Manufacturer	Catalogue
<b>Printing Production Department Paper and Cover Stock</b>						
1	1000	Offset paper, inexpensive, good quality 50 lb. 29.45 cwt. (as 50 lb Wave Springhill packed in 100 lb. units) Normal consumption of one machine is about 100,000 lbs.	29.45	29,450.00	Wave Springhill	R. Finn Bulkley Dunton Linde Lathrop Inc 295 - 5th Ave New York N.Y. 10016 (212 679 5050)
2	100	Offset paper, pre-sentation quality, 70 lb weight per carton 60.49	60.49	6,049.00	Wave Springhill	
3	70	Cover paper, offset, average quality, 65 lb weight per carton 68.10:				
3a	10	White	68.10	681.00	Wave Springhill	
3b	10	Pink 70	68.10	681.00	Wave Springhill	
3c	10	Lemon 65	68.10	681.00	Wave Springhill	
3d	10	Turquoise 65	68.10	681.00	Wave Springhill	

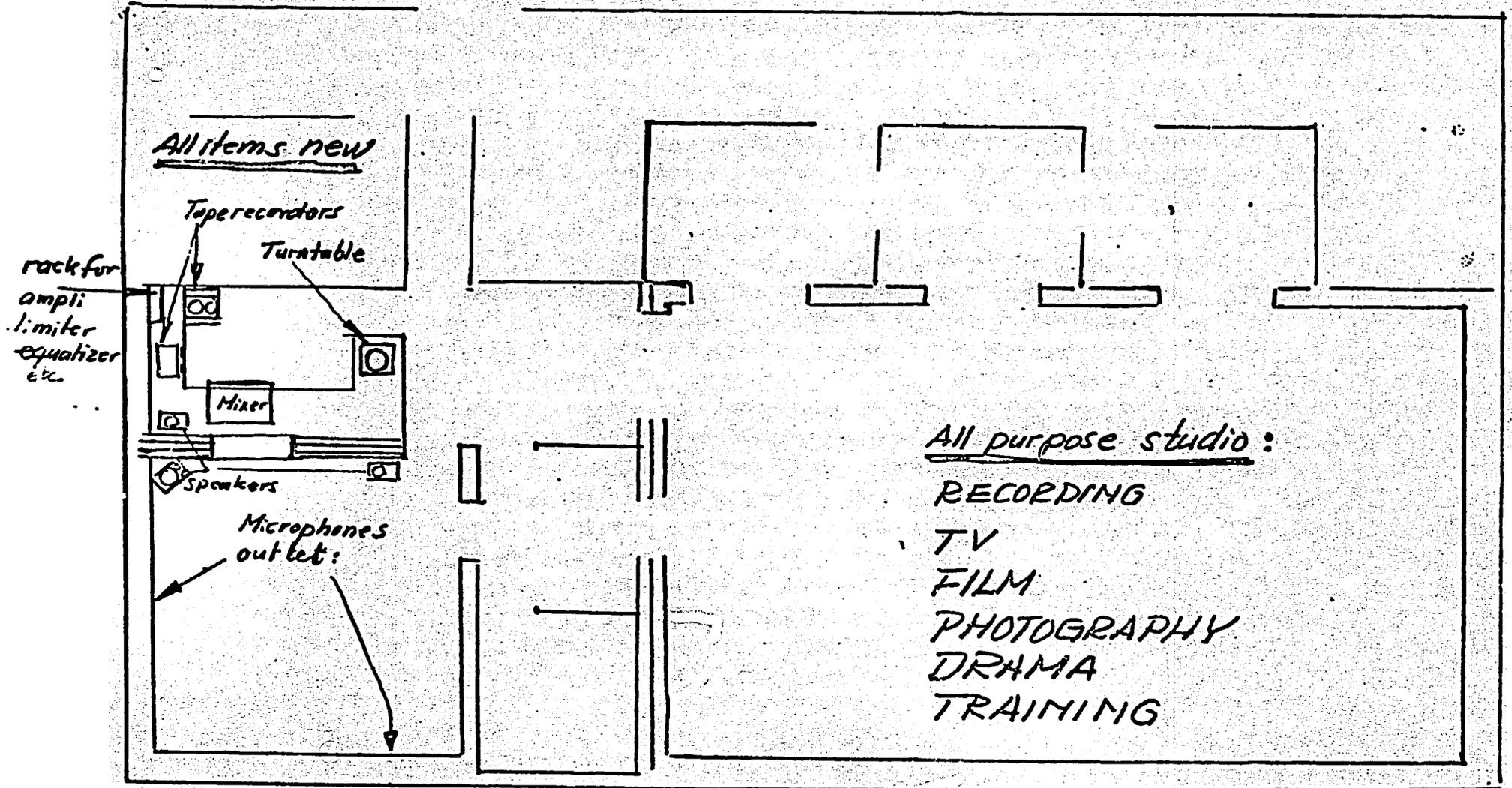
**Appendix II:**

**Floor plans indicating placement  
of existing and new equipment.**

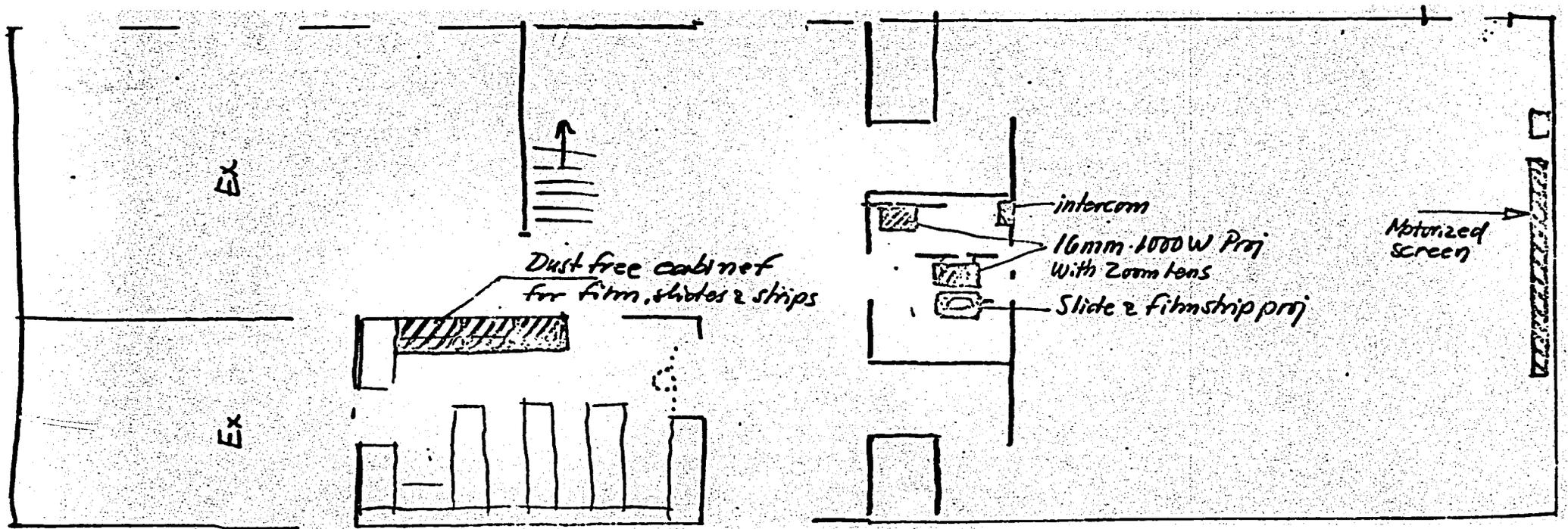


**PRINTING & FINISHING DEPARTMENT**

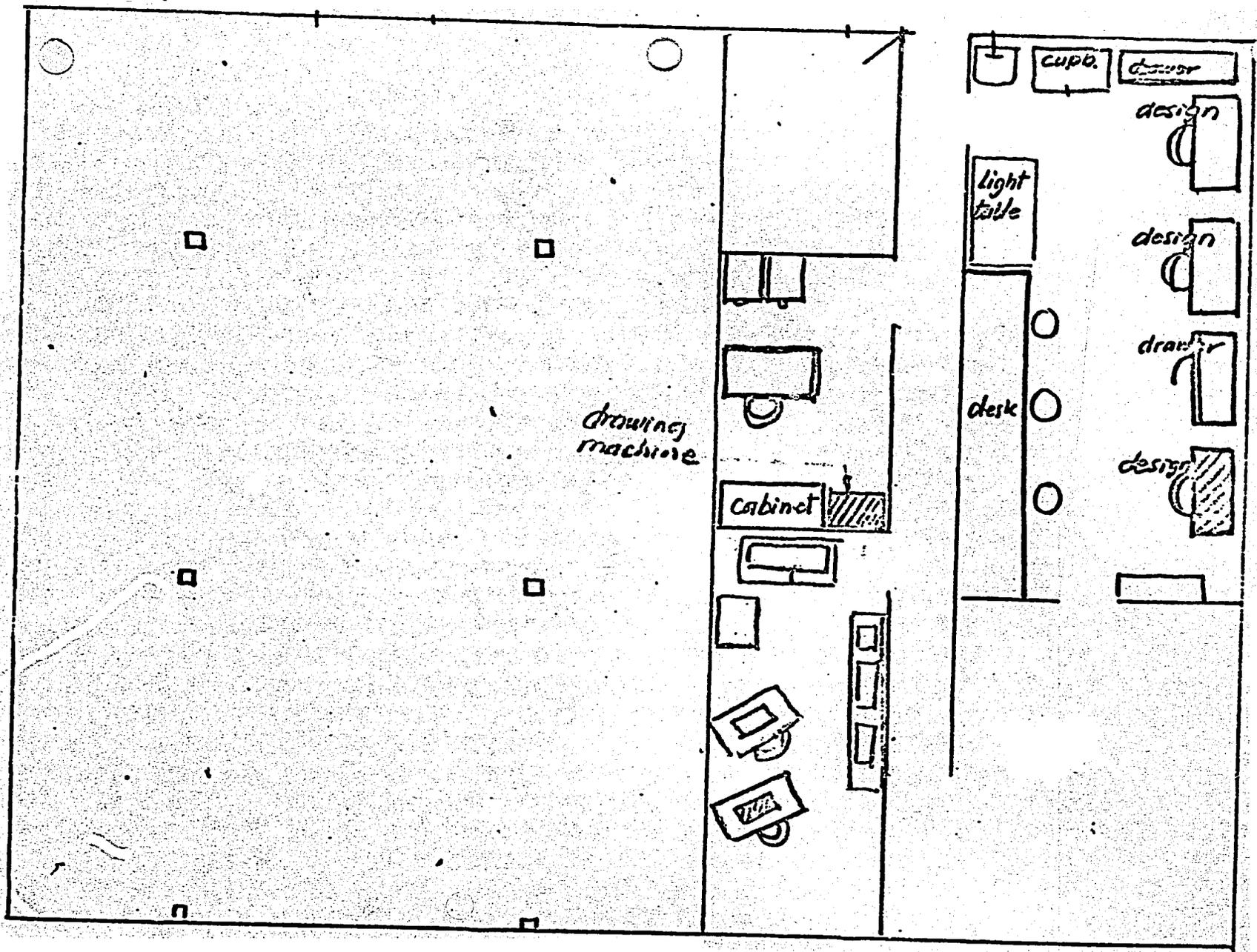
RECORDING DEP.



RECORDING & RADIO DEPARTMENT



AV Library & Auditorium



ART DEPARTMENT

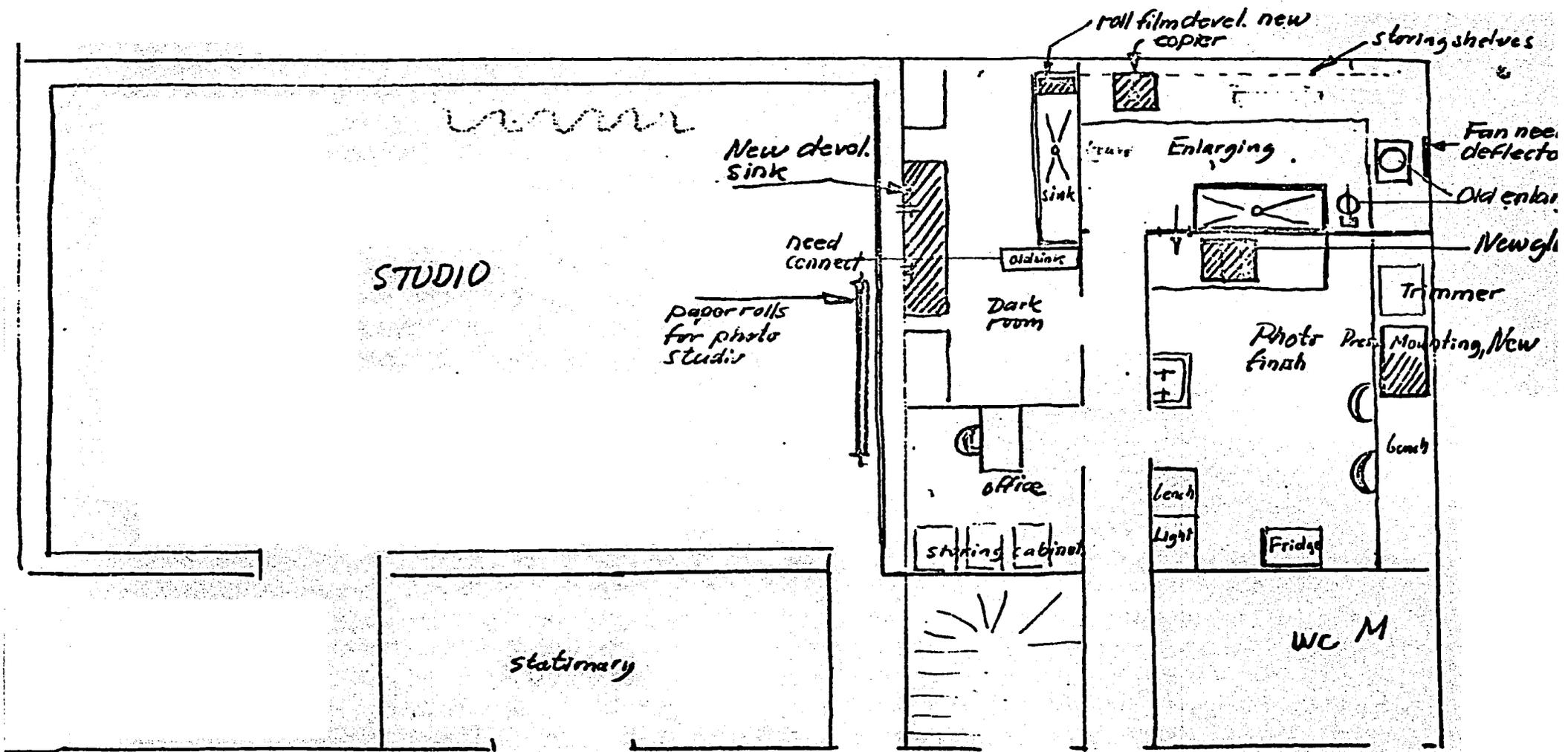
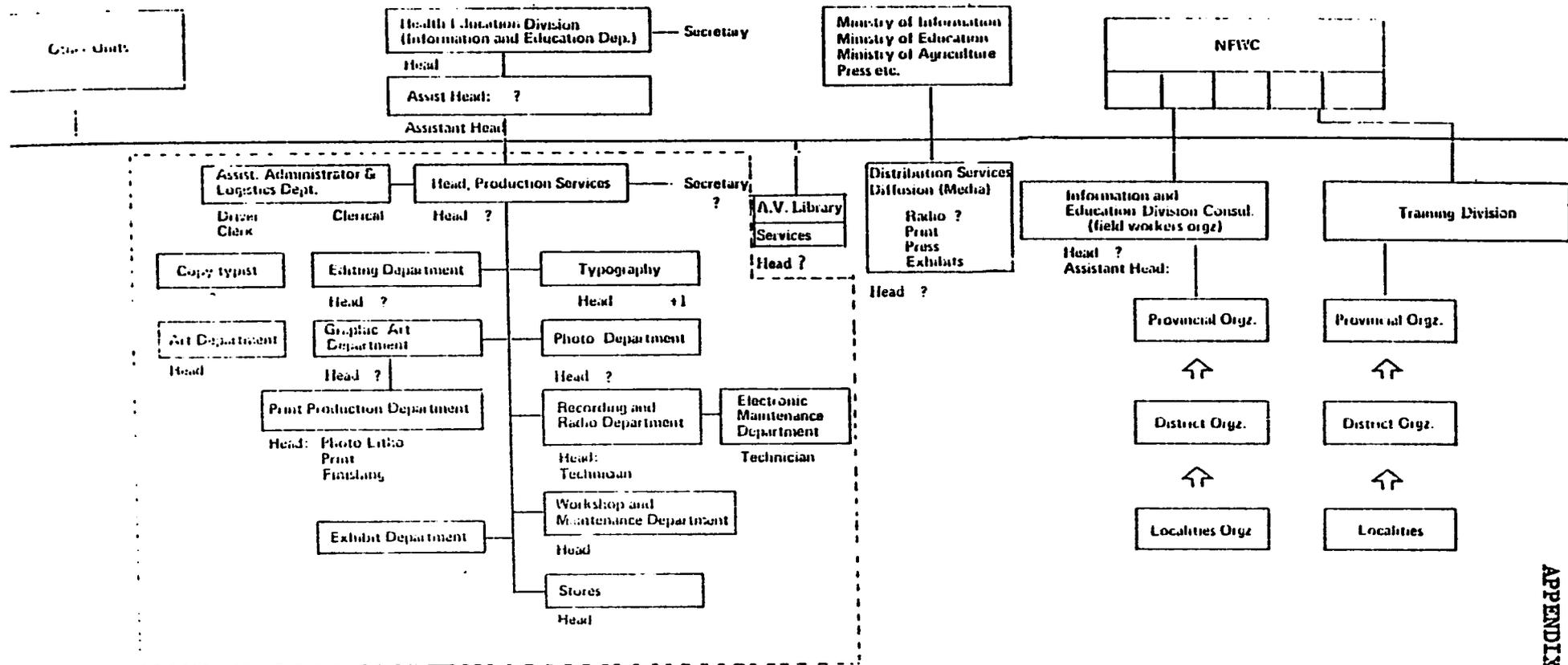


PHOTO DEPARTMENT

**APPENDIX III: Functional organization chart of the Production Services at the Health Education Division, MOII. Govt. of Kenya.**

The question marks suggest areas where barriers to effective work is apparent.

Attention should be focussed on the functioning on the three services involved, i.e. the Production services, The A.V. Library Services and The Distribution, Diffusion Services. The preparation of job descriptions of the heads of these services might be a priority.



Note for the record: Suggested communication equipment for field -  
educators and officers

By: Bjorn Berndtson

Each province should be equipped for back-up of the mobile-van system when operating in their area.

Thus, it is important to have 16 mm projectors and generators as part of an out-reach and backstopping activity - at least in each province - but preferable in several selected districts where the population density so demands.

On the district-level, there are supervisors (FHFO) who need to have several types of diffusion equipment in order to utilize the material produced by the HE Prod. Unit. Tape recorder and slide projectors are ideal for this purpose since the mobile system provides complementary access to movies.

To support the groups of 10 Educators (FHFE) working in the localities all over the country, the supervisor will at first lend his equipment to the educators until suitable equipment has been tried out and provided in a planned way.

The necessary local production which has been recommended could be tried out in a pilot project, (1) where at least one of the vans will become a "production center" and stay longer in selected villages and with assistance of district and locality personnel, and using a very low cost technology, and the staff will produce, with the participation of the villagers, local versions of centrally suggested material. Such material could then be used by a member of educators in the same particular area, and (2) where at least four or five of the district officers will have the same basic communication production kit at his or her disposal for the same kind of local production.

These efforts will be closely supervised and the equipment to start provisional backstopping would consist of:

7 16 m/m  
7 Generators  
1 Slide Projector  
(1 Cassette Recorder)

The district-level would have need for the following equipment:

1 Slide Projector, with 2 rechargable batteries  
(1 Cassette Recorder is already provided.)

The pilot project for local production would utilize one mobile van for this type of production and also provide one or several district officers

with the same kit. The following equipment would be involved:

Slide making equipment:

- 1 Camera
- 1 Developing tank, films and chemicals, other accessories

Stencil equipment:

- 1 Duplicator
- Stylus for drawing on stencils
- Stencils, etc.

Equipment for field educators and officers

Project, 16 mm with microphone (as Bell and Howell Model 8302) - Film Sound	557.00	Bell and Howell, N.Y.
Spare lamps for above	8	
Generator 1500W As ONAN	2	ONAN
Projector, slide, 220V and 12V. (as TMC Model 150)	39.00	TMC Corp. 25 W. 45th St., N.Y.
Spare lamps 12V	5.00	
Spare lamps 200V	5.00	
Carry case	7.50	
Screen, (as Da-Lite Model Versatol 60 x 60!!)	68.00	Da-Lite
Carry case for above	6.00	

Basic Production Kit

Camera, as Vivitar model 220/SL W/55 f. 2.8	119.00	
Case for above	14.95	
Close up lens No. 2	5.00	
Developing tank, (as Rodimax 35U daylight model.)	25.00	Peer Less, N.Y.
Chemicals, Unibaths	6.00	

Starex insta-film kit with slide mounts	10.00	Starex Co., N.Y.
Duplicator, Manual (ink or spirit.)	120.00	
Paper, for above	50.00	
Typewriter	220.00	
(Cassette Recorder)	Available	
Rechargeable battery	20.00	Exide
Radio ITT	17.00	ITT Uniccif's model