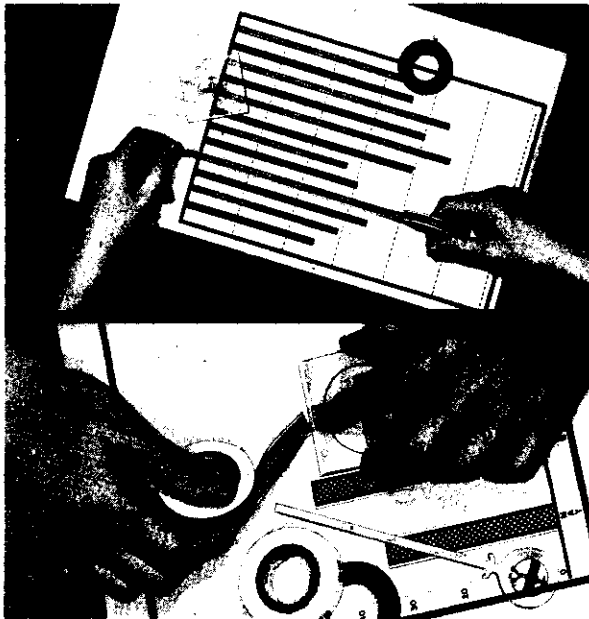
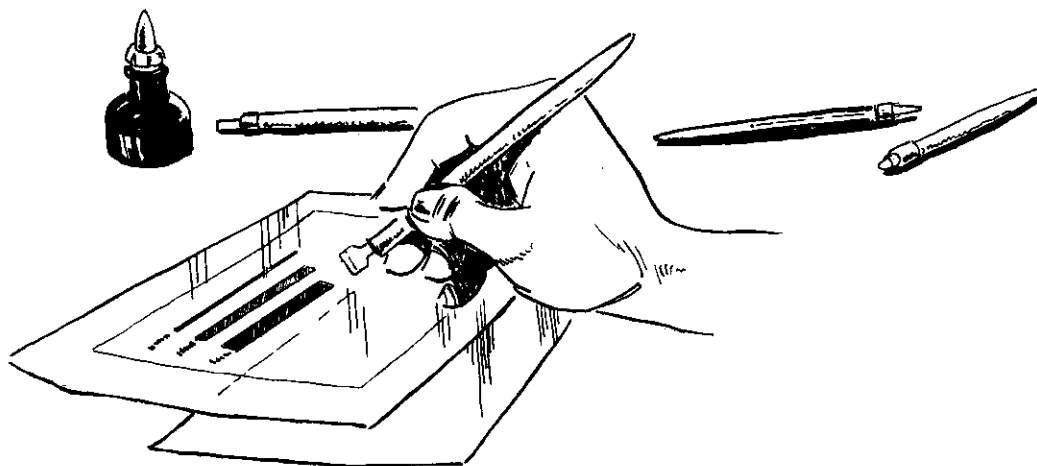


SECTION VIII. NEW PRODUCTS AND IDEAS

- e. TRANSPARENT COLORED TAPES AND SYMBOLS - This item is commercially available in a wide selection of colors, widths, shapes, and patterns to simplify local preparation of transparencies. Since the materials are available in transparent as well as opaque form, they are especially suited to direct application on clear plastic sheets for preparing transparencies of maps, graphs, and charts.



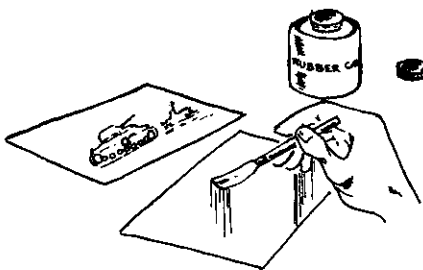
- f. COLORLED INKS - Transparent oil-base inks and felt-tipped pens for their application, (such as Flo-Master), have been commercially developed especially for hand coloring of overhead projector transparencies. The felt tips are interchangeable for broad or fine line marking.



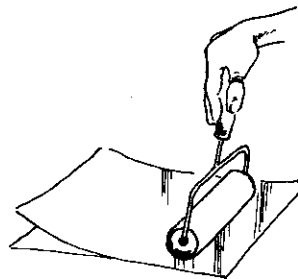
SECTION VIII. NEW PRODUCTS AND IDEAS

g. THE RUBBER CEMENT METHOD - The so-called "rubber cement technique" provides an ingenious method for preparing a transparency by "lifting" it from the original. The original must be printed on paper which has a clay coating, e. g., Life Magazine. * This prerequisite can be verified by moistening a finger and rubbing on a corner of the original. If a white deposit rubs off, the original is clay-coated.

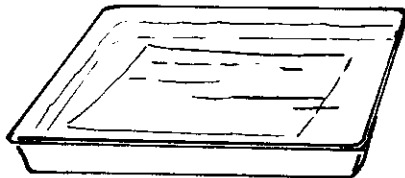
- (1) Brush an even coat of thinned rubber cement on the original and on a sheet of clear plastic.
- (2) When the cement is dry, press the two coated surfaces together carefully, smoothing out air bubbles with a roller or similar device.
- (3) Soak the combined sheets in warm water for several minutes to loosen the paper backing. Then, without removing the sheets from the water, gently sponge off the remaining clay coating and paper fibers.
- (4) After drying, protect the transparency with a plastic spray or by sandwiching between two clear plastic sheets.



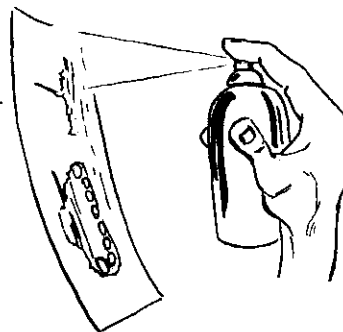
1



2



3

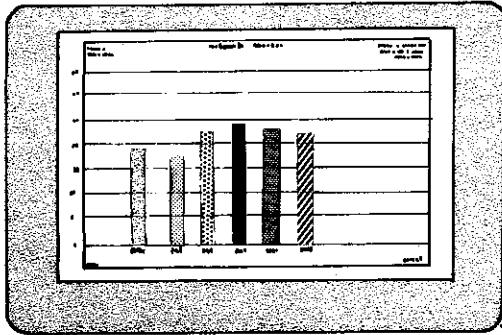


4

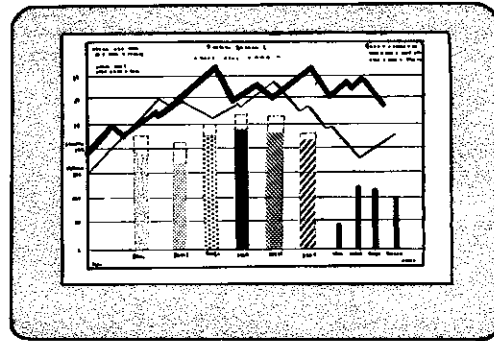
SECTION VIII. NEW PRODUCTS AND IDEAS

h. THREE CARDINAL RULES

- (1) KEEP IT SIMPLE! - Eliminate all superfluous, confusing information on the transparency.

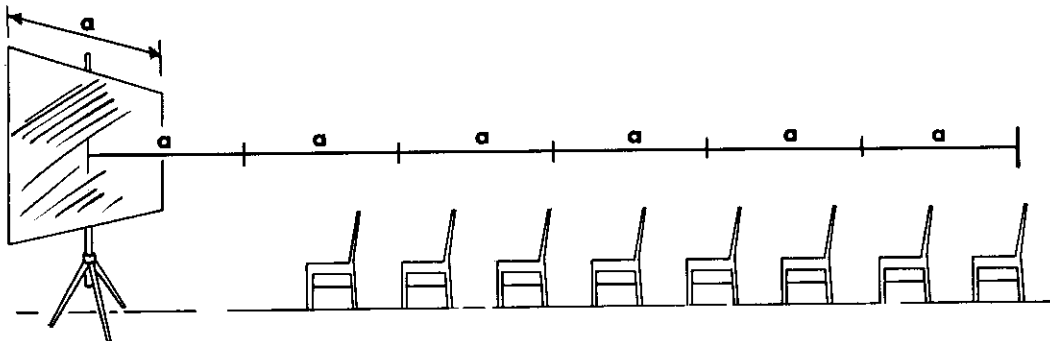


RIGHT

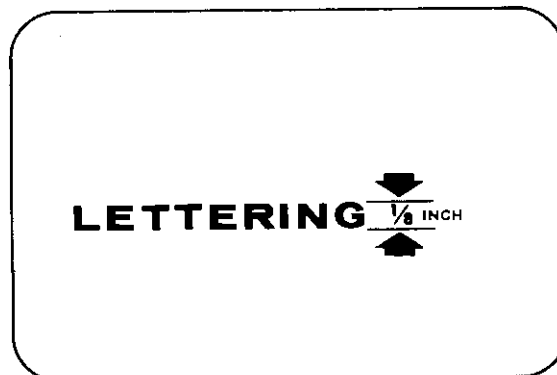


WRONG

- (2) FOLLOW THE 6W FORMULA! - The distance from the projection screen to the furthest member of the audience should never exceed six widths of the screen.



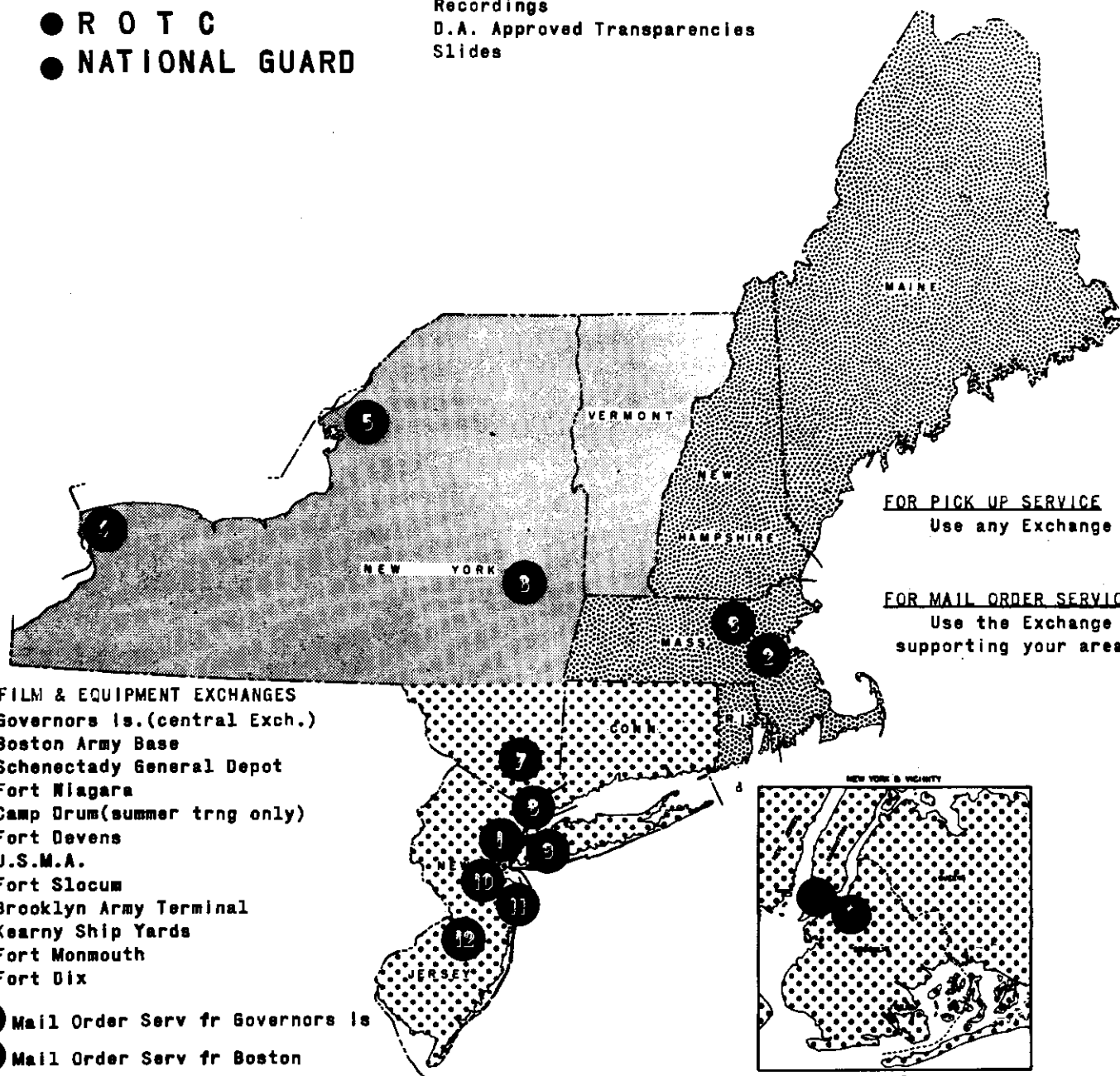
- (3) LETTERING ON AN OVERHEAD PROJECTOR TRANSPARENCY
MUST BE NO SMALLER THAN 1/8 INCH (assuming that the 6W formula is adhered to)



WHERE to GET

- ACTIVE ARMY
- ARMY RESERVE
- R O T C
- NATIONAL GUARD

16mm Sound Training Films
35mm Film Strips
Recordings
D.A. Approved Transparencies
Slides



FOR PICK UP SERVICE
Use any Exchange

FOR MAIL ORDER SERVICE
Use the Exchange
supporting your area

FILM & EQUIPMENT EXCHANGES

1. Governors Is. (central Exch.)
2. Boston Army Base
3. Schenectady General Depot
4. Fort Niagara
5. Camp Drum (summer trng only)
6. Fort Devens
7. U.S.M.A.
8. Fort Slocum
9. Brooklyn Army Terminal
10. Kearny Ship Yards
11. Fort Monmouth
12. Fort Dix

● Mail Order Serv fr Governors Is

● Mail Order Serv fr Boston

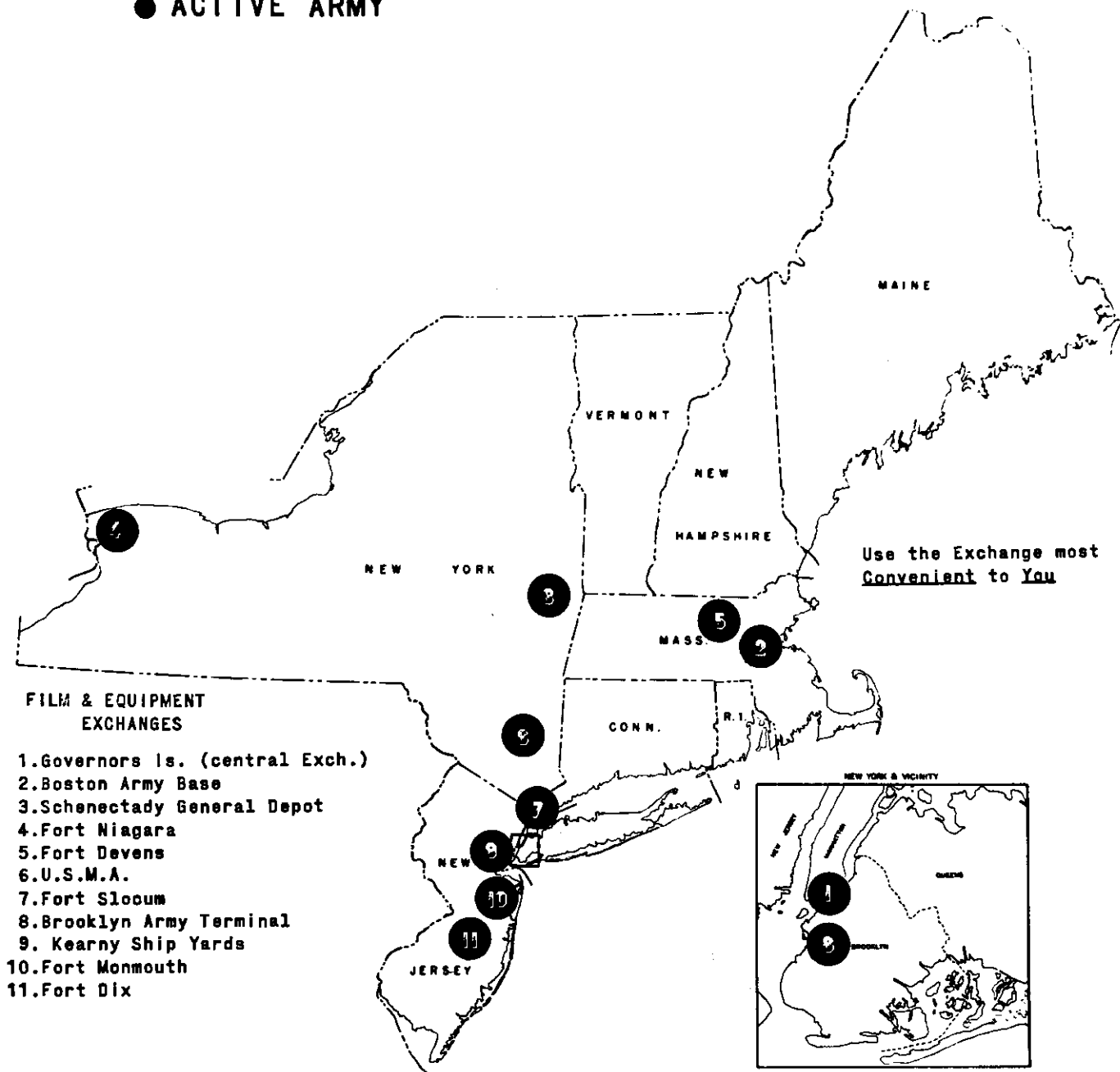
● Mail Order Serv fr Schenectady

● Pick-up Serv only

SERVICE SUPPORT CHART # 1

WHERE to GET PROJECTION EQUIPMENT

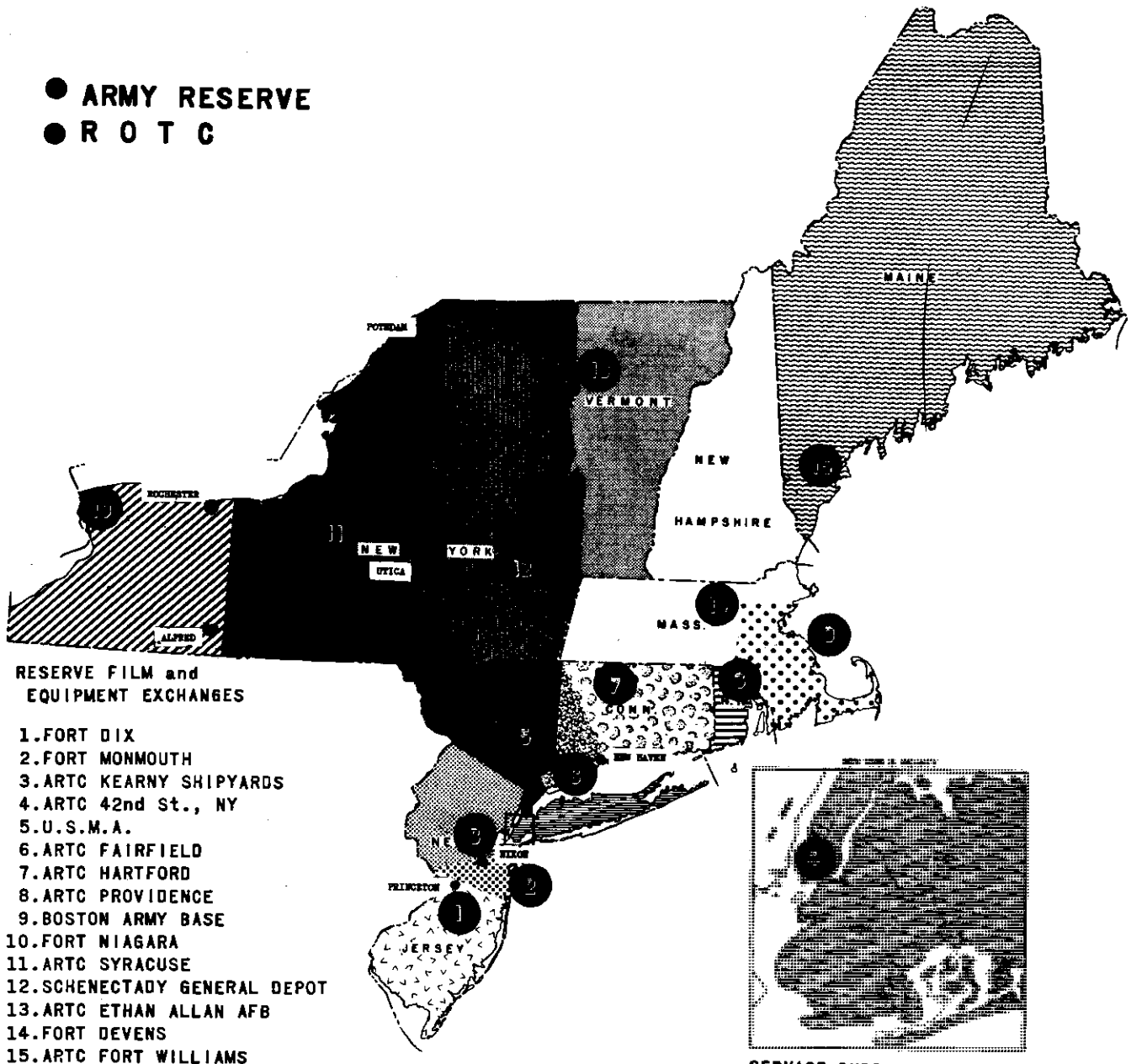
● ACTIVE ARMY



SERVICE SUPPORT CHART # 2

WHERE to GET PROJECTION EQUIPMENT

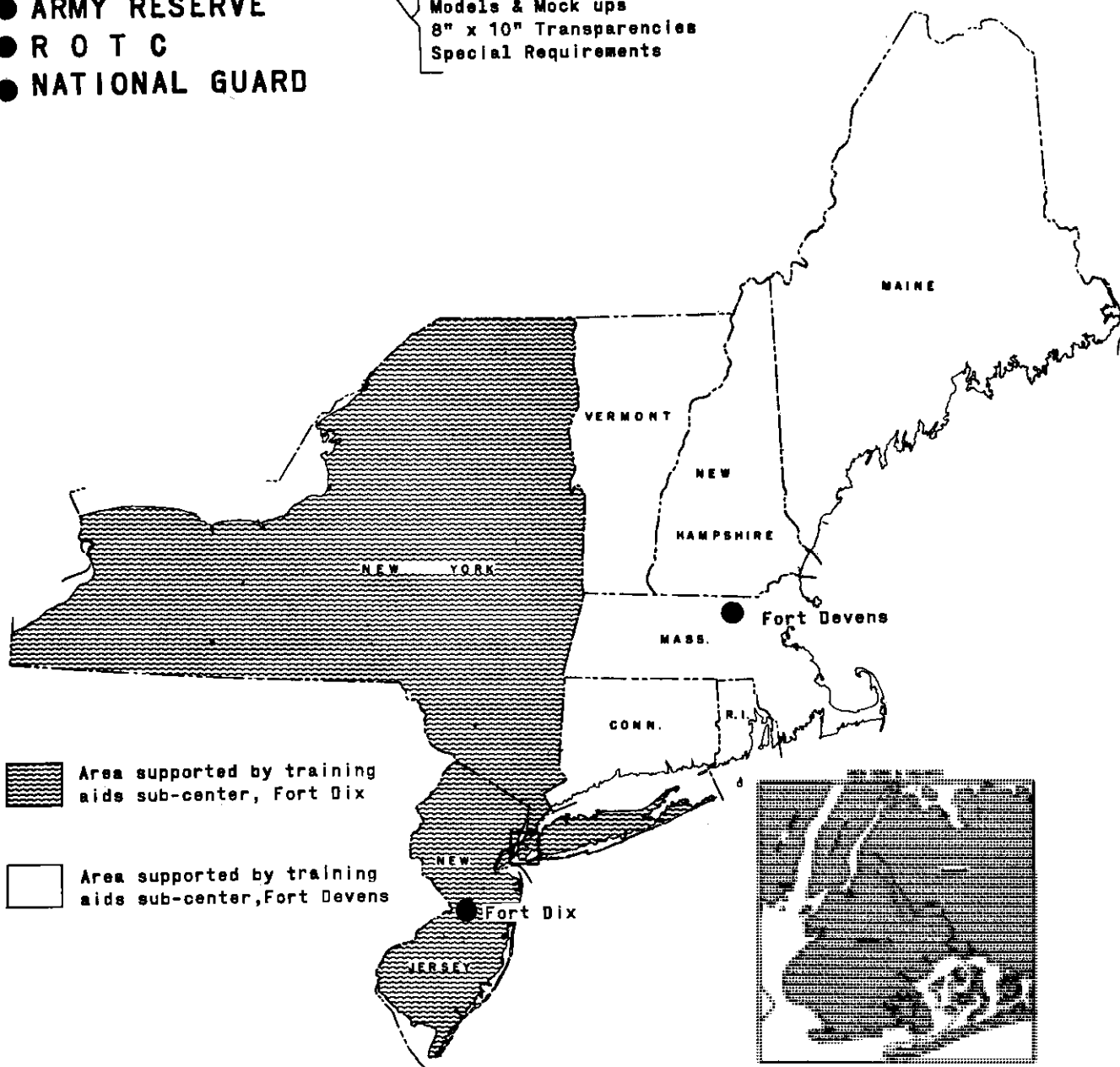
- ARMY RESERVE
- R O T C



WHERE to GET

- ACTIVE ARMY
- ARMY RESERVE
- R O T C
- NATIONAL GUARD

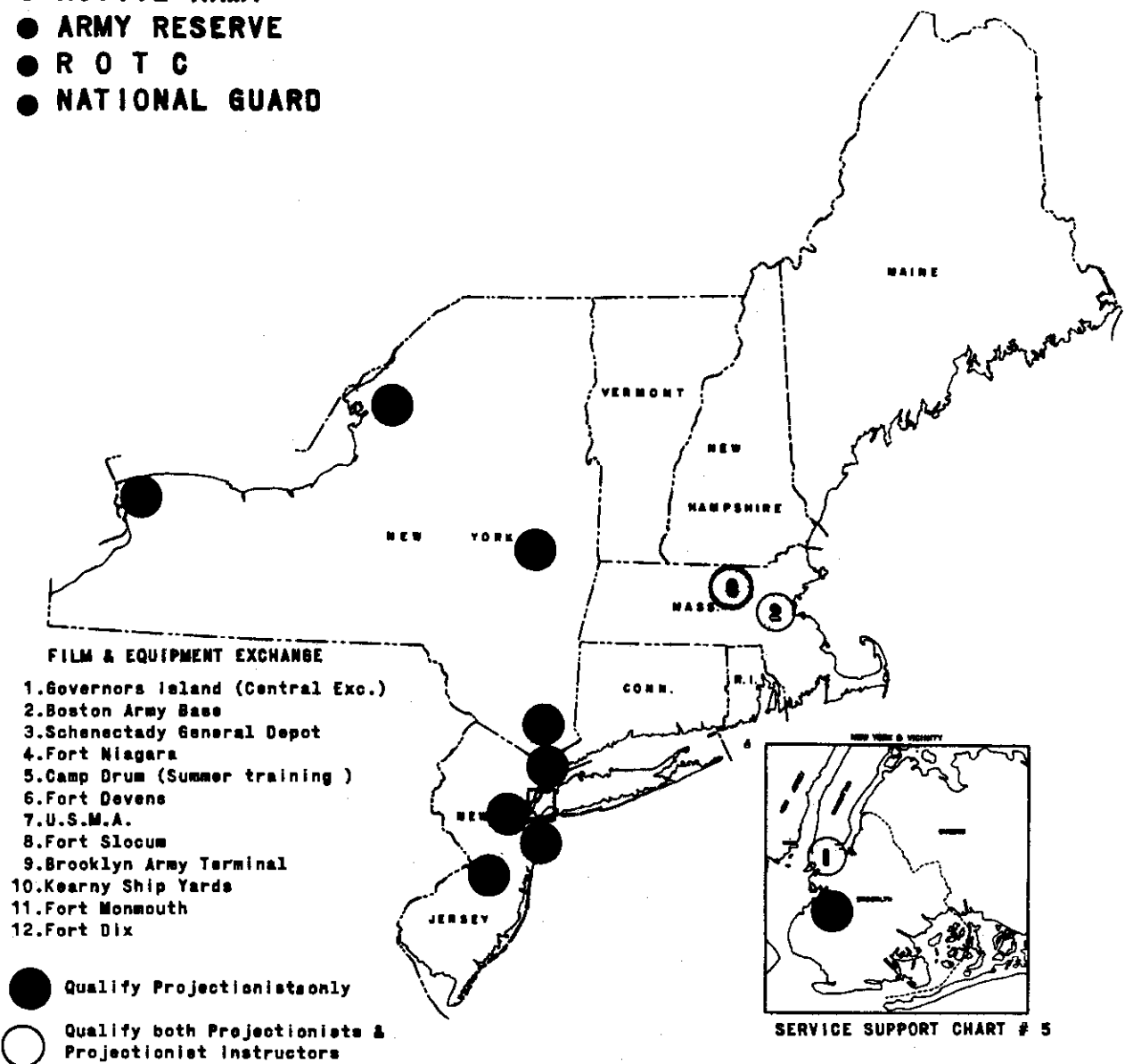
Charts & Posters
Models & Mock ups
8" x 10" Transparencies
Special Requirements



SERVICE SUPPORT CHART # 4

LOCATION of PROJECTIONIST and PROJECTIONIST INSTRUCTOR SCHOOLS

- ACTIVE ARMY
- ARMY RESERVE
- R O T C
- NATIONAL GUARD



FILMS AND FILM STRIPS LOAN ORDER (AR 108-30)				FOR EXCHANGE USE ONLY					
NAME OF FILM AND EQUIPMENT EXCHANGE Regional Film & Equipment Exchange Boston Army Base Boston 10, Mass.				EXCHANGE REQUEST NUMBER					
				SHIPPING DATES					
				OUT		DUE IN			
				METHOD OF SHIPMENT					
ISSUE TO <div style="border: 1px solid black; padding: 5px; margin: 5px;"> Btry X XXXth AA Gun Bn Fort Knight, Mass. </div>				<input type="checkbox"/> PICKUP <input type="checkbox"/> EXPRESS <input type="checkbox"/> MAIL		INSURANCE NUMBER			
				CONFIRMATION MAILED					
				INITIALS		DATE			
				RECORD OF RETURNED FILMS					
CHECK METHOD OF DELIVERY <input checked="" type="checkbox"/> PICKUP <input type="checkbox"/> MAIL <input type="checkbox"/> EXPRESS <input type="checkbox"/> OTHER _____				ACTUAL DATES FILMS WILL BE SHOWN					
				FROM		TO		INSPECTED BY DATE	
				1 July 57		7 July 57			
FILM NUMBER	FILM TITLES	PRINT NUMBER	NUMBER OF SHOWINGS			ATTENDANCE			
			ACTIVE ARMY	CIV. COMP.	ALL OTHERS				
TF 6-1757	Field Artillery Radar		1			35			
TF 7-1542	Heavy Weapons Company in attack		3			127			
<div style="border: 1px solid black; padding: 5px; display: inline-block;"> PLEASE BE CERTAIN TO FILL IN THESE COLUMNS AND RETURN INFORMATION WITH FILMS </div>									
INSTRUCTIONS: List film numbers and titles in space provided above. Indicate method of delivery and actual showing dates. Shipping time will be allowed by exchange. AFTER SHOWING, return copy of this form to exchange with films indicating showing and attendance information as required by SC Form 390 (Reports Control Symbol SIG-12) and AR 108-30. Damaged films should be returned immediately to the exchange with full report of circumstances on reverse side of this form. Nonmilitary borrowers must sign certificate on reverse side of form. FILMS MUST BE RETURNED AT AGREED UPON TIME. DO NOT REWIND FILMS AFTER LAST SHOWING.			REQUESTING OFFICER (Signature, grade, title)						
			John J. Doe, Capt., Arty						
			REQUESTER'S TELEPHONE NUMBER		DATE				
			WH 4-7933		10 June 57				
			FILMS RECEIVED (Signature, authorized rep.)						
			Pfc Richard Smith						
			DATE						
			1 July 57						

DA FORM 11-44
1 AUG 55

REPLACES DA FORM 11-44, 1 JAN 55, WHICH WILL BE USED UNTIL EXHAUSTED.

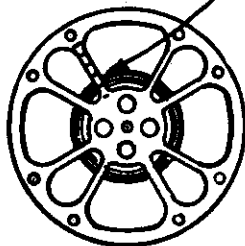
SCREEN IMAGE SIZE TABLE FOR 16-MM PROJECTORS

(UPPER DIMENSION IS HEIGHT OF PICTURE)
(LOWER DIMENSION IS WIDTH OF PICTURE)

LENS FOCAL LENGTH	DISTANCE FROM SCREEN (IN FEET)								
	5'	10'	20'	30'	40'	50'	60'	75'	100'
3/4"	1' 10" 2' 6"	3' 9" 5' 0"	7' 6" 10' 0"						
1"	1' 5" 1' 11"	2' 10" 3' 9"	5' 7" 5' 6"	8' 6" 11' 4"					
1-1/2"	0' 11" 1' 3"	1' 10" 2' 6"	3' 9" 5' 0"	5' 7" 7' 6"	7' 6" 10' 0"	9' 4" 12' 6"			
2" *		1' 4" 1' 10"	2' 10" 3' 9"	4' 1" 5' 6"	5' 6" 7' 5"	7' 0" 9' 4"	8' 4" 11' 2"	10' 5" 14' 0"	14' 0" 18' 9"
2-1/2"		1' 2" 1' 6"	2' 3" 3' 0"	3' 4" 4' 6"	4' 6" 6' 0"	5' 7" 7' 6"	6' 9" 9' 0"	8' 5" 11' 3"	11' 2" 15' 0"
3"				2' 10" 3' 9"	3' 9" 5' 0"	4' 8" 6' 3"	5' 7" 7' 6"	7' 0" 9' 4"	9' 4" 12' 6"
3-1/2"				2' 4" 3' 2"	3' 2" 4' 3"	4' 0" 5' 4"	4' 8" 6' 3"	6' 0" 8' 0"	7' 11" 10' 8"
4"				2' 1" 2' 10"	2' 10" 3' 9"	3' 6" 4' 8"	4' 1" 5' 6"	5' 3" 7' 0"	7' 0" 9' 4"

* LENS NORMALLY SUPPLIED WITH 16-MM PROJECTORS

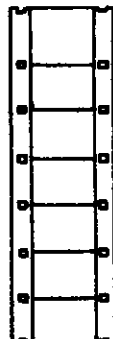
FOOTAGE SCALE
ON MOST REELS



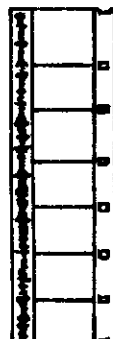
8MM



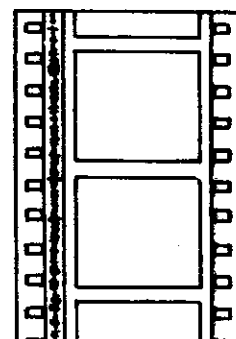
16MM
(SILENT)



16MM
(SOUND)



35 MM



RUNNING TIME FOR MOTION PICTURE FILM

RUNNING TIME IN MINUTES

FEET OF FILM	SILENT 8MM	FILMS 16MM	SOUND * 16MM	FILMS 35MM
12	1.0 MIN	.5 MIN		
24	2.0	1.0		
36	3.0	1.5	1.0 MIN	
90	7.5	3.8	2.5	1.0 MIN
150	12.5	6.3	4.2	1.7
200	16.6	8.3	5.5	2.2
300	25.0	12.5	8.3	3.3
400	33.3	16.6	11.1	4.4
500			13.9	5.5
600			16.6	6.7
700			19.4	7.8
800			22.2	8.9
900			25.0	10.0
1000			27.8	11.1
1100			30.5	12.2
1200			33.3	13.3
1300			36.1	14.4
1400			38.8	15.5
1500			41.7	16.7
1600			44.4	17.8
1700			47.2	18.9
1800			50.0	20.0
1900			52.8	21.1
2000			55.6	22.2

* MOST ARMY FILMS ARE 16MM SOUND

MOTION PICTURE FILM REEL SIZES

8MM 100'- 400'

16MM (SILENT) 400'

16MM (SOUND) 400',- 800',- 1200',- 1600',- 2000'

35MM 1000'- 2000'

CAUTION: NEVER RUN SOUND FILM ON A SILENT PROJECTOR

SCREEN IMAGE SIZE TABLE FOR FILM STRIP PROJECTORS

(UPPER DIMENSION IS HEIGHT OF PICTURE. LOWER DIMENSION IS WIDTH OF PICTURE)

FOCAL LENGTH LENS	DISTANCE FROM LENS TO SCREEN IN FEET							
		10'	15'	20'	30'	40'	50'	75'
5"	SINGLE-FRAME	1' 2" 1' 9"	1' 9" 2' 8"	2' 5" 3' 7"	3' 7" 5' 5"	5' 6" 7' 2"	6' 3" 9' 0"	9' 5" 13' 6"
	DOUBLE-FRAME	1' 8" 2' 7"	2' 5" 3' 11"	3' 7" 5' 3"	5' 5" 7' 11"	7' 4" 10' 7"	9' 3" 13' 3"	13' 9" 19' 11"
7"	SINGLE-FRAME	0' 11" 1' 4"	1' 4" 2' 0"	1' 11" 2' 8"	2' 11" 3' 11"	3' 11" 5' 4"	4' 11" 6' 7"	
	DOUBLE-FRAME	1' 4" 1' 11"	2' 0" 2' 11"	2' 7" 3' 11"	3' 11" 5' 11"	5' 2" 7' 10"	6' 5" 9' 7"	

SCREEN IMAGE SIZE TABLE

FOR LANTERN SLIDE PROJECTOR AP-4

(UPPER DIMENSION IS HEIGHT OF PICTURE. LOWER DIMENSION IS WIDTH OF PICTURE)

	DISTANCE FROM LENS TO SCREEN IN FEET				
	15'	20'	30'	40'	50'
3-1/4" X 4"	2' 9"	3' 6"	5' 8"	7' 6"	9' 5"
GLASS SLIDE	3' 6"	4' 8"	7' 2"	9' 8"	12' 0"

**SCREEN IMAGE SIZE TABLE
FOR OPAQUE PROJECTOR
AP-5**

(UPPER DIMENSION IS HEIGHT OF PICTURE. LOWER DIMENSION IS WIDTH OF PICTURE.)

SIZE MATERIAL USED IN PROJECTOR	DISTANCE FROM LENS TO SCREEN IN FEET			
	7-1/2'	10'	15'	20'
10" X 10"	2' 10" 2' 10"	4' 0" 4' 0"	6' 6" 6' 6"	8' 9" 8' 9"
8" X 10"	2' 3" 2' 10"	3' 6" 4' 4"	5' 4" 6' 0"	7' 0" 8' 9"
5" X 7"	1' 5" 2' 0"	2' 2" 3' 0"	3' 4" 4' 7"	4' 5" 6' 2"
4" X 5"	1' 2" 1' 5"	1' 9" 2' 2"	2' 8" 3' 4"	3' 6" 4' 5"

SCREEN IMAGE SIZE TABLE

FOR

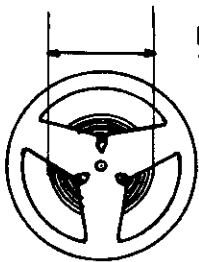
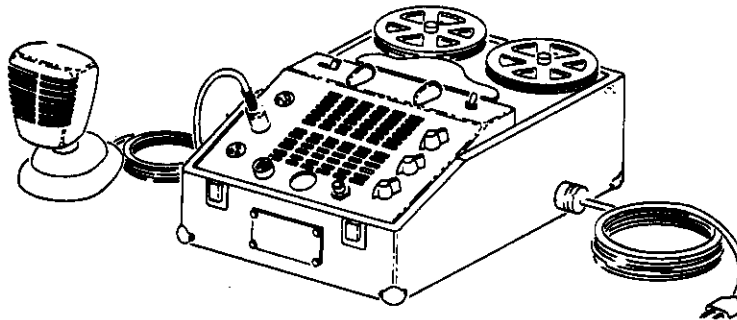
OVERHEAD PROJECTOR

PH - 637

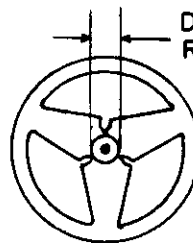
SIZE OF SCREEN IMAGE WHEN USING	DISTANCE FROM OVERHEAD MIRROR TO SCREEN IN FEET					
	4'	6'	8'	10'	12'	14'
8" X 10" OPENING	26" X 31"	39" X 52"	52" X 67"	67" X 84"	84" X 99"	99" X 106"
10" X 10" OPENING	31" X 31"	49" X 49"	67" X 67"	84" X 84"	99" X 99"	106" X 106"
3-1/4" X 4" SLIDES		28" X 31"	37" X 41"	48" X 52"	57" X 62"	67" X 73"
2" X 2" OPENING		20" X 30"	26" X 39"	33" X 49"	39" X 59"	46" X 68"
35-MM FILM STRIPS		15" X 20"	20" X 26"	25" X 33"	30" X 40"	35" X 46"

PLAYING TIME

RD-87 TAPE RECORDER REPRODUCER



DIAMETER OF
TAPE ON REEL



DIAMETER OF
REEL HUB

PLAYING TIME IN MINUTES AT 7-1/2 INCHES PER SECOND

DIAMETER OF TAPE ON REEL (IN INCHES)	DIAMETER OF REEL HUB IN INCHES			
	1-3/4" HUB	2-1/4" HUB	2-3/4" HUB	4-1/2" HUB
2 - 1/2	2.6 MIN	.9 MIN		
3	4.9 MIN	3.2 MIN	1.1 MIN	
3 - 1/2	7.6 MIN	5.9 MIN	3.8 MIN	
4	10.7 MIN	9.0 MIN	6.9 MIN	
4-1/2	14.2 MIN	12.5 MIN	10.4 MIN	
5	18.2 MIN	16.5 MIN	14.4 MIN	3.9 MIN
5 - 1/2	22.5 MIN	20.8 MIN	18.7 MIN	8.2 MIN
6	27.3 MIN	25.6 MIN	23.5 MIN	13.0 MIN
6 - 1/2	32.5 MIN	30.8 MIN	28.7 MIN	18.2 MIN
7				23.8 MIN
7 - 1/2				29.8 MIN
8				36.2 MIN
8 - 1/2				43.0 MIN
9				50.4 MIN
9 - 1/2				58.0 MIN
10				66.0 MIN

PLAYING TIME AT 3-3/4 INCHES PER SECOND IS TWICE THAT SHOWN ABOVE