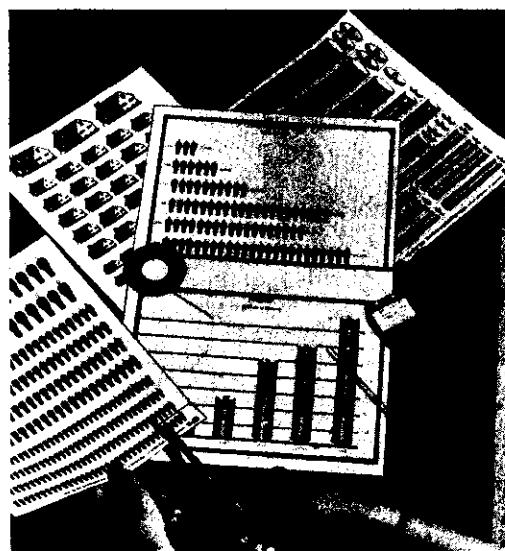
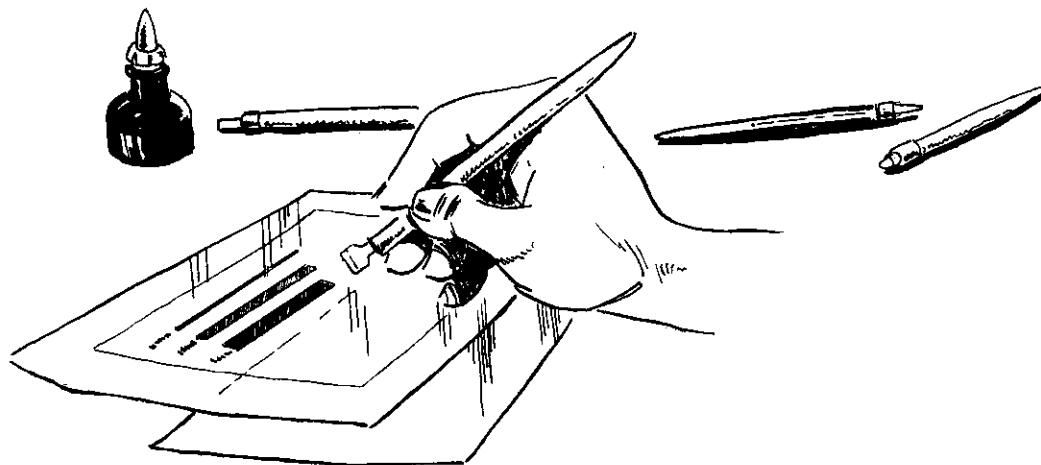


SECTION VIII. NEW PRODUCTS AND IDEAS

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.



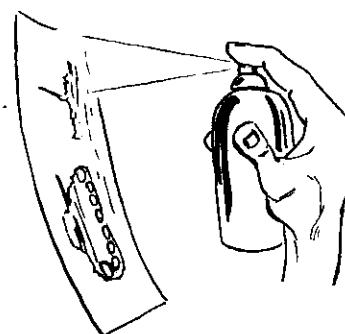
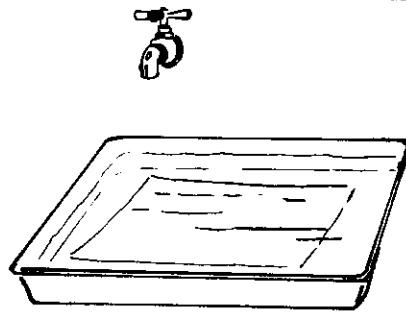
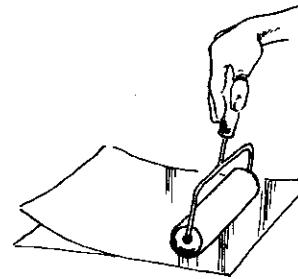
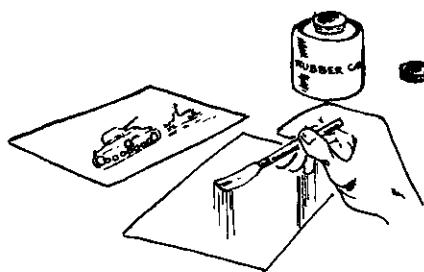
f. COLORED INKS - Transparent oil-base inks and felt-tipped pens for their application, (such as Flo-Master), have been commercially developed especially for hand coloring of overhead projector transparencies. The felt tips are interchangeable for broad or fine line marking.



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.

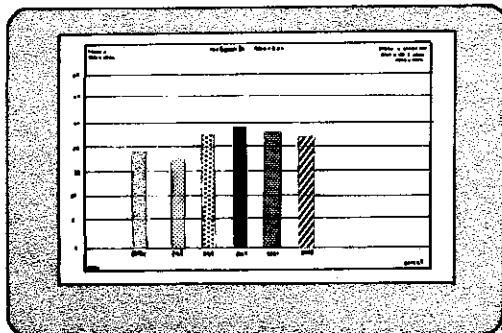
- (1) Brush an even coat of thinned rubber cement on the original and on a sheet of clear plastic.
- (2) When the cement is dry, press the two coated surfaces together carefully, smoothing out air bubbles with a roller or similar device.
- (3) Soak the combined sheets in warm water for several minutes 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.



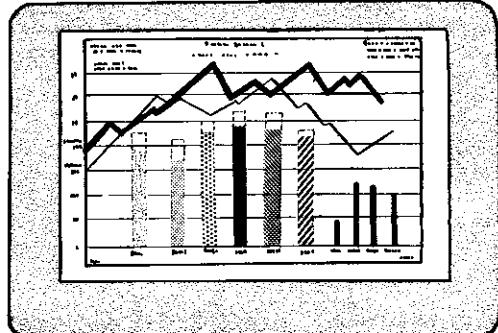
SECTION VIII. NEW PRODUCTS AND IDEAS

h. THREE CARDINAL RULES

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

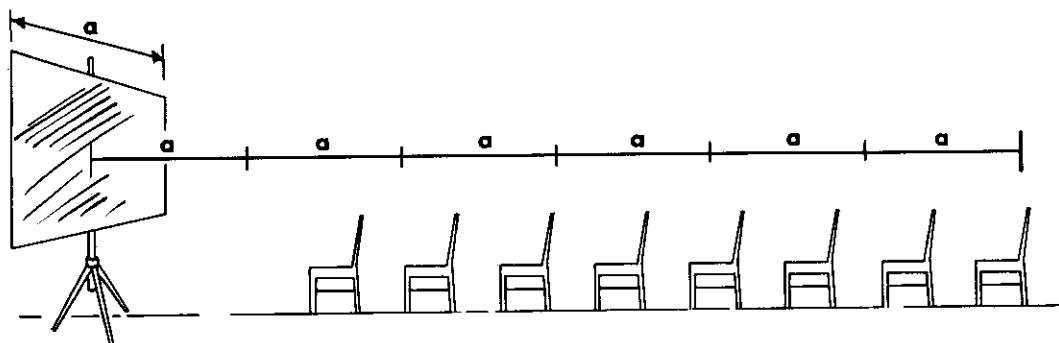


RIGHT

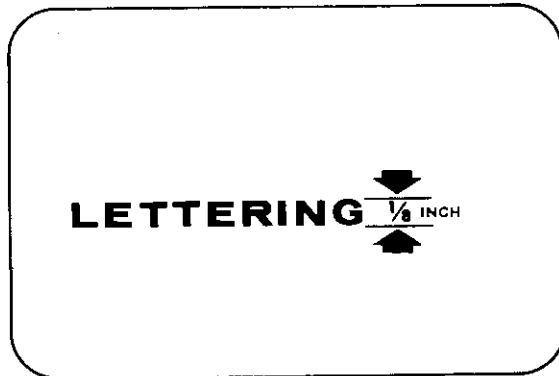


WRONG

(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.



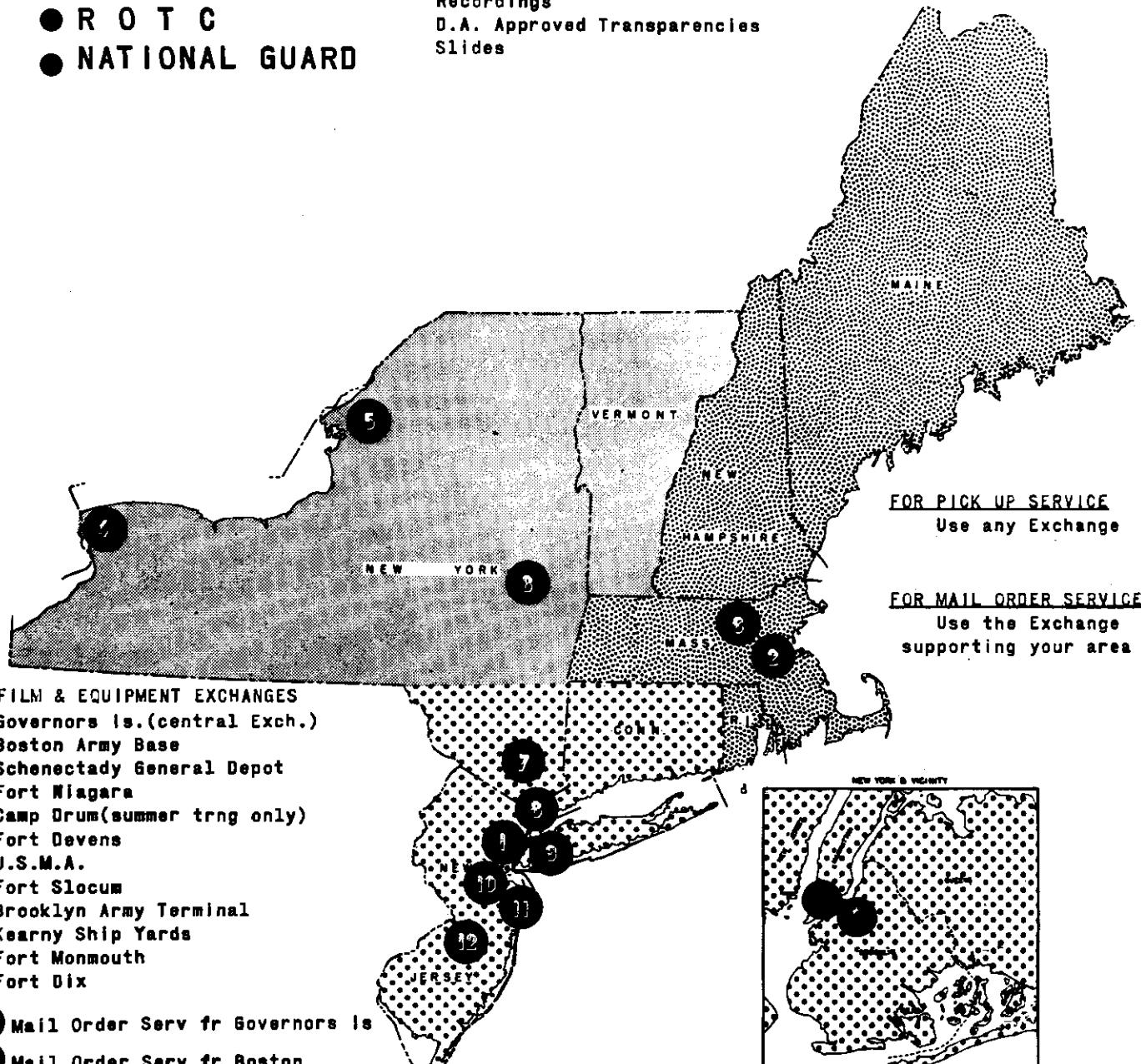
(3) LETTERING ON AN OVERHEAD PROJECTOR TRANSPARENCY MUST BE NO SMALLER THAN 1/8 INCH (assuming that the 6W formula is adhered to)



WHERE to GET

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

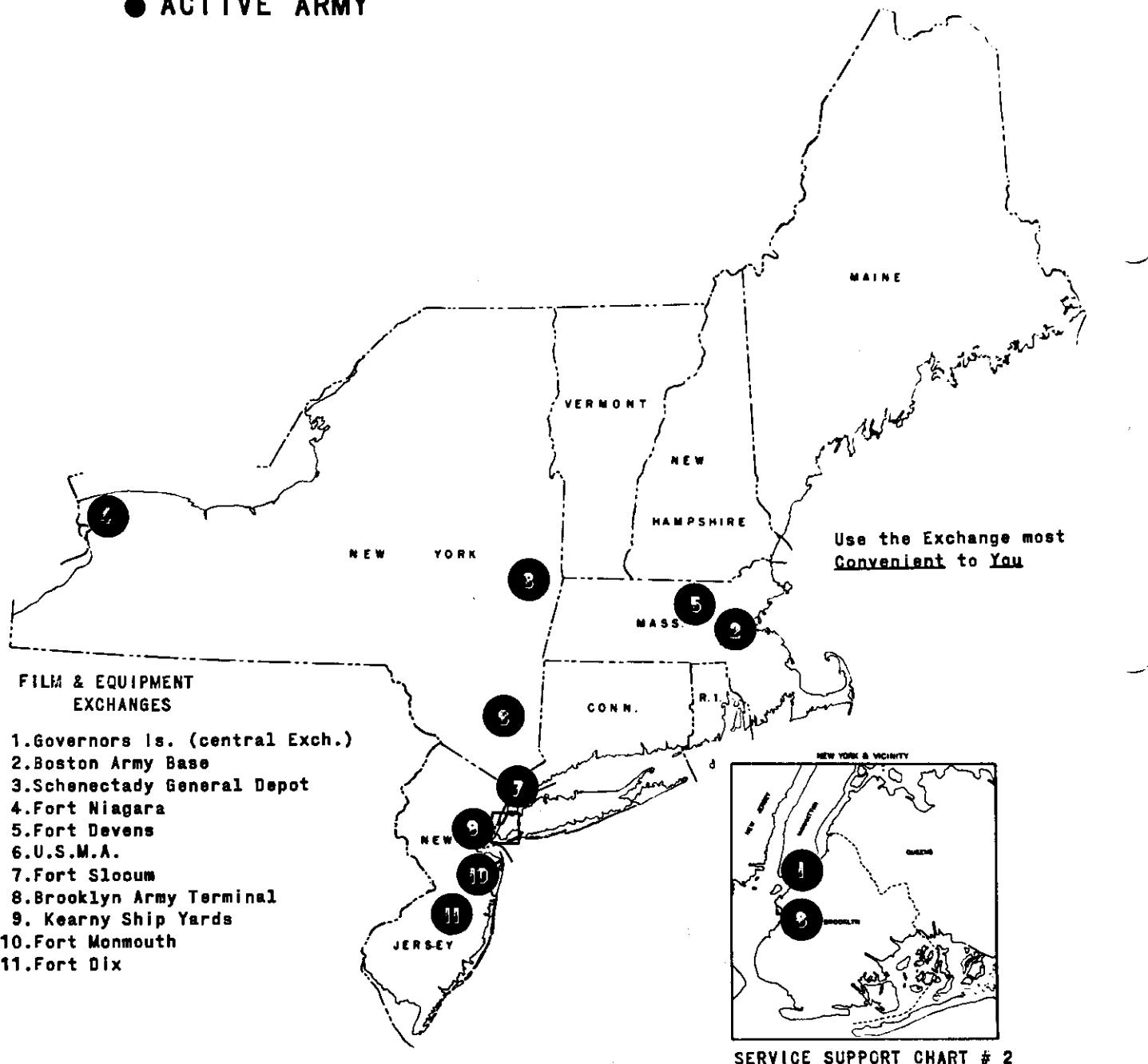
16mm Sound Training Films
35mm Film Strips
Recordings
D.A. Approved Transparencies
Slides



SERVICE SUPPORT CHART # 1

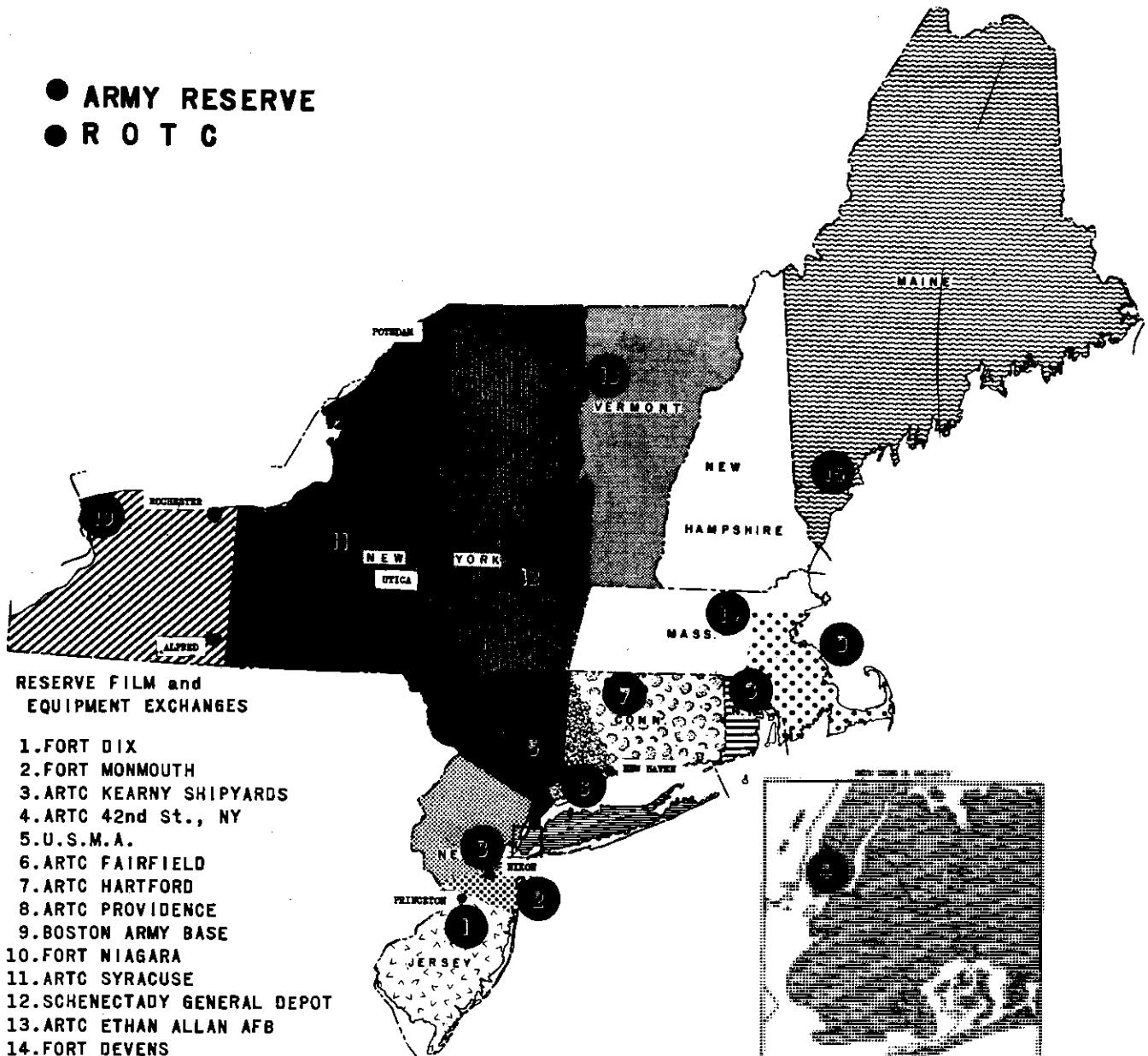
WHERE to GET PROJECTION EQUIPMENT

● ACTIVE ARMY



WHERE to GET PROJECTION EQUIPMENT

- ARMY RESERVE
- R O T C

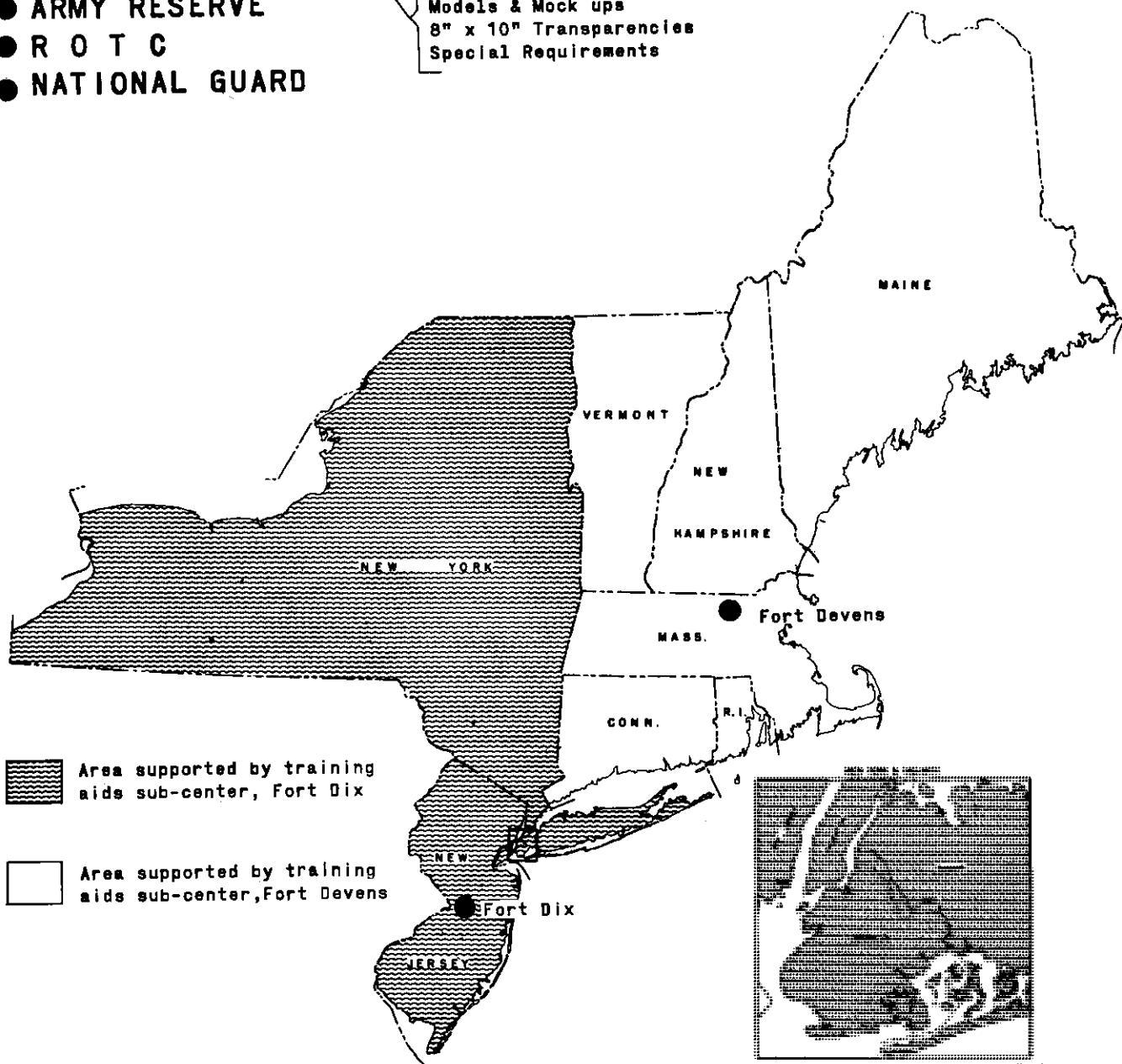


SERVICE SUPPORT CHART # 3

WHERE to GET

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

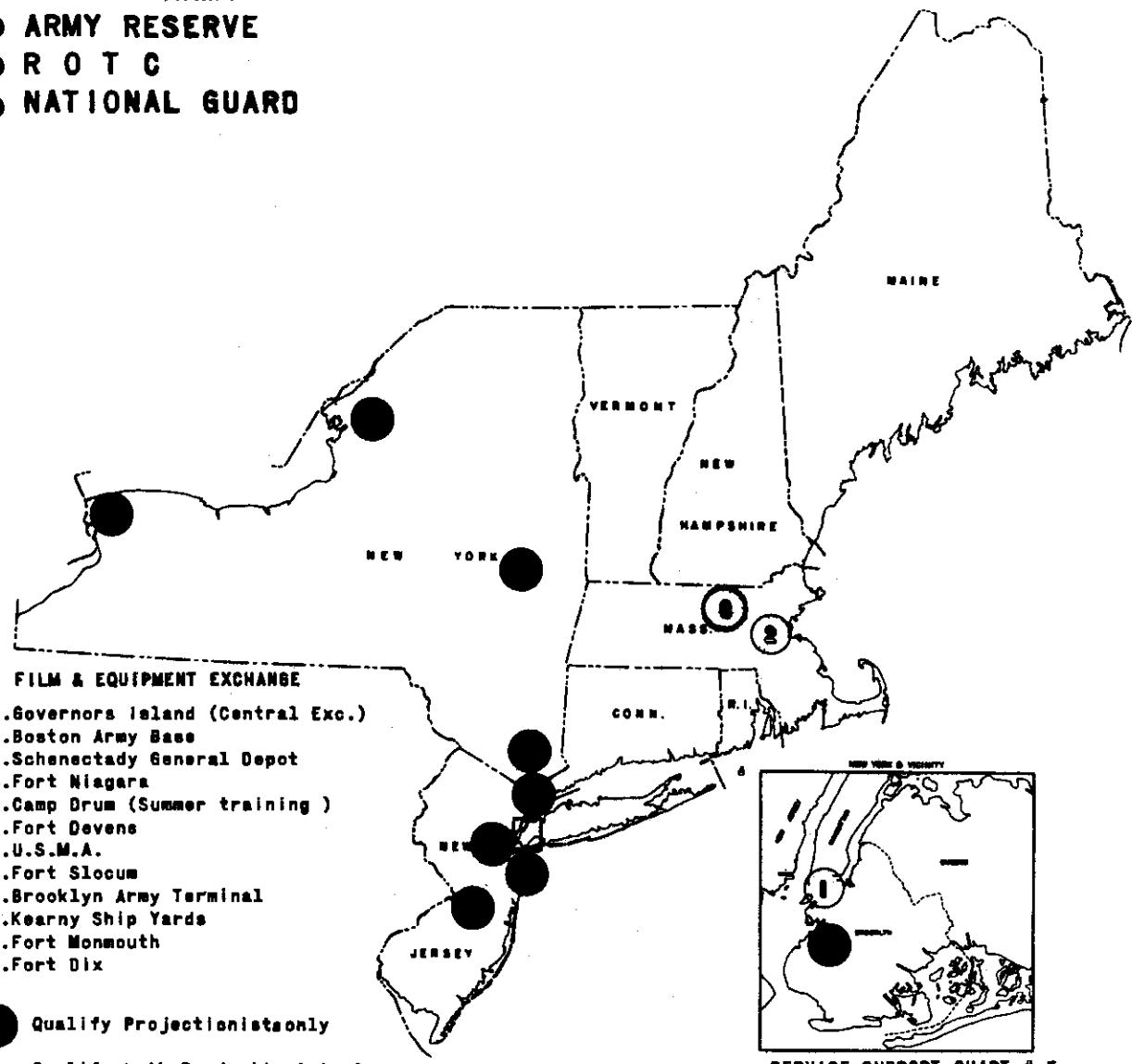
Charts & Posters
Models & Mock ups
8" x 10" Transparencies
Special Requirements



SERVICE SUPPORT CHART # 4

LOCATION of PROJECTIONIST and PROJECTIONIST INSTRUCTOR SCHOOLS

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



DA FORM 1 AUG 55 11-44

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

PROJECTION EQUIPMENT LOAN ORDER (AR 108-30)		REQUEST NUMBER		
NAME OF FILM AND EQUIPMENT EXCHANGE Regional Film & Equipment Exchange Boston Army Base Boston 10, Mass.		INSTRUCTIONS		
ISSUE TO Btry X XXXth AA Gun Bn Fort Knight, Mass.		<p>It is the responsibility of the requesting officer to authorize only licensed "Official U.S. Army 16mm Projectionists" to operate projection and allied equipment in accordance with Para. 49, Sec. IX, AR 108-30.</p> <p>First echelon maintenance will be performed by licensed operator in accordance with AR 750-628 (DA Form 11-256). Equipment requiring higher echelon maintenance will be returned to issuing Exchange for repair or replacement.</p> <p>List AN/PFP-1, or AS-2, etc. as appropriate under "TYPE". After use, return this form WITH equipment to Exchange to obtain release of responsibility signature. Equipment must be returned on date specified. Projectionist's report on reverse side MUST be completed before return of equipment.</p>		
CHECK METHOD OF DELIVERY <input checked="" type="checkbox"/> PICKUP <input type="checkbox"/> SHIP <input type="checkbox"/> OTHER (Specify)		ACTUAL DATES EQUIPMENT WILL BE USED		
		FROM 1 July 57	TO 7 July 57	
EQUIPMENT		TYPE	EXCHANGE OR SERIAL NUMBER	DATE ISSUED
16MM SOUND PROJECTOR		AS-2		1 July 57
35MM FILM STRIP PROJECTOR				
OPAQUE PROJECTOR				
OVERHEAD PROJECTOR				
SCREEN		BM-1 70" x 70" Tripod		1 July 57
REPRODUCER				
EXTRA LENS				
SLIDE PROJECTOR, 3 1/2 X 4				
VISUAL AID ILLUSTRATION UNIT				
PORTABLE TRANSPARENCY PRINTER				
TAPE RECORDER				
I CERTIFY THAT ALL ITEMS INDICATED HEREON AS ISSUED HAVE BEEN RECEIVED				
DATE 1 July 57	SIGNATURE & TELEPHONE NO. OF REQUESTING OFFICER John J. Doe, Capt., Arty	DATE 1 July 57	SIGNATURE OF AUTHORIZED REPRESENTATIVE Pfc Richard Smith	
I CERTIFY THAT ALL ITEMS INDICATED HEREON AS ISSUED HAVE BEEN RETURNED				
DATE	SIGNATURE OF RECEIVING CLERK			

DA FORM 1 AUG 58 11-43

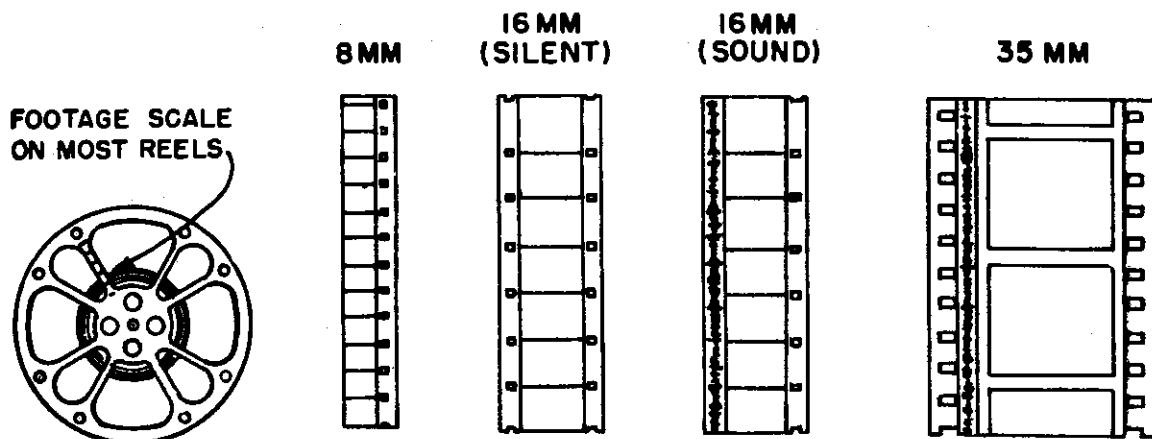
REPLACES DA FORM 11-43, 1 JUL 54 WHICH IS OBSOLETE

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"	3' 9"	7' 6"						
	2' 6"	5' 0"	10' 0"						
1"	1' 5"	2' 10"	5' 7"	8' 6"					
	1' 11"	3' 9"	5' 6"	11' 4"					
1-1/2"	0' 11"	1' 10"	3' 9"	5' 7"	7' 6"	9' 4"			
	1' 3"	2' 6"	5' 0"	7' 6"	10' 0"	12' 6"			
* 2"		1' 4"	2' 10"	4' 1"	5' 6"	7' 0"	8' 4"	10' 5"	14' 0"
		1' 10"	3' 9"	5' 6"	7' 5"	9' 4"	11' 2"	14' 0"	18' 9"
2-1/2"		1' 2"	2' 3"	3' 4"	4' 6"	5' 7"	6' 9"	8' 5"	11' 2"
		1' 6"	3' 0"	4' 6"	6' 0"	7' 6"	9' 0"	11' 3"	15' 0"
3				2' 10"	3' 9"	4' 8"	5' 7"	7' 0"	9' 4"
				3' 9"	5' 0"	6' 3"	7' 6"	9' 4"	12' 6"
3-1/2"				2' 4"	3' 2"	4' 0"	4' 8"	6' 0"	7' 11"
				3' 2"	4' 3"	5' 4"	6' 3"	8' 0"	10' 8"
4"				2' 1"	2' 10"	3' 6"	4' 1"	5' 3"	7' 0"
				2' 10"	3' 9"	4' 8"	5' 6"	7' 0"	9' 4"

* LENS NORMALLY SUPPLIED WITH 16-MM PROJECTORS



RUNNING TIME FOR MOTION PICTURE FILM

RUNNING TIME IN MINUTES

FEET OF FILM	SILENT 8MM	FILMS 16MM	SOUND * 16 MM	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"	2' 5"	3' 7"	5' 6"	8' 3"	9' 5"
		1' 9"	2' 8"	3' 7"	5' 5"	7' 2"	9' 0"	13' 6"
7"	SINGLE-FRAME	1' 8"	2' 5"	3' 7"	5' 5"	7' 4"	9' 3"	13' 9"
		2' 7"	3' 11"	5' 3"	7' 11"	10' 7"	13' 3"	19' 11"

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" GLASS SLIDE	2' 9"	3' 6"	5' 8"	7' 6"	9' 5"
	3' 6"	4' 8"	7' 2"	9' 8"	12' 0"

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

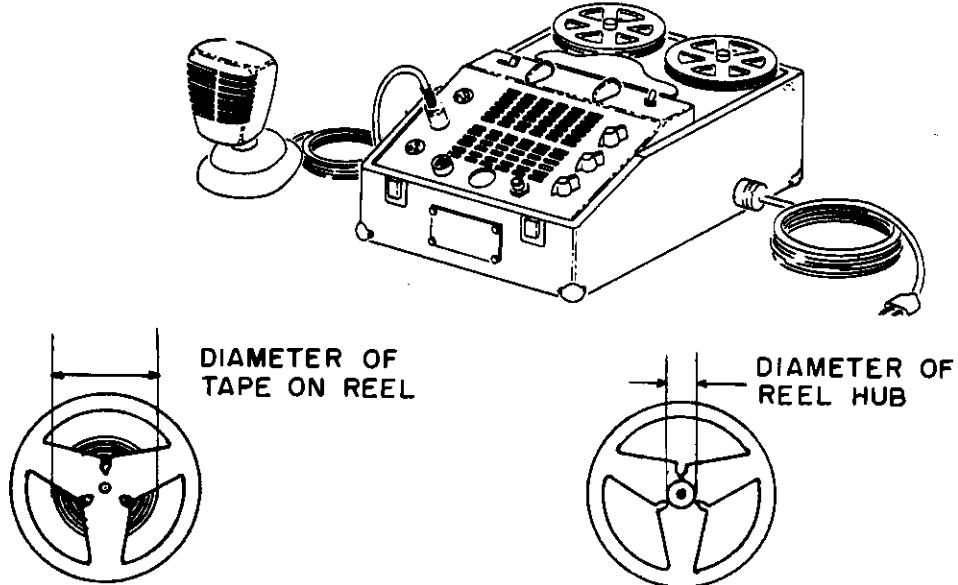
(UPPER DIMENSION IS HEIGHT OF PICTURE. LOWER DIMENSION IS WIDTH OF PICTURE.)

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 58"	46" X 66"
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



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