

## INTERPRETIVE SKILLS I

**LESSON PLAN:** 10

**SESSION TITLE:** AUDIO/VISUAL MAINTENANCE TECHNIQUES

**SESSION LENGTH:** 2-4 Hours

**ORIG. PREPARED BY:** J. Cika, 1/83; L. Wiese 10/83  
**REVISED BY:** W. Fuchs 1/92

**OBJECTIVES:** At the end of this session participants will be able to:

1. Set up, operate, and break down the movie projectors commonly distributed by the Harper's Ferry Depot;
2. Splice film;
3. Set up, operate, and break down the 35mm Carousel projectors and dissolve units commonly distributed by the Harper's Ferry Depot;
4. Set up and break down a portable film screen;
5. Set up, operate, and break down a VCR and monitor;
6. Be able to operate a LaBelle A/V unit and cassette tape player;
7. Perform basic maintenance on the equipment listed above.

**TRAINING AIDS:** Movie/slide projectors, projection screen, spare bulbs (light/sound), spare reel and leader, maintenance/cleaning kit, cassette tape deck, and splicing kit.

**HANDOUTS:** Audio visual kit checklist, list of HFC contacts, carousel routine maintenance, trouble shooting guide for dissolve control, basic differences of slide projectors.

Content	Method	
<b>Time</b>		
I. Introduction  A.What we intend to cover 1. Audio visuals and their role in interpretation. 2.Basic operation and maintenance of Movie and slide projectors, tape players/recorders, VCRs and monitors, and associated support equipment. 3. Practice sessions  II. Audio visuals as a way of life. How they fit in a parks "overall" program.  A.Orientation 1. Park resources 2. Programs and activities  B.Education 1. Park resources 2. Park themes 3. Current or future Park operations	Lecture - flip charts - visual examples  "examples" by question- ing  Flip chart Chalk board	3 - 5 Minutes  5 Minutes

C. Campfire programs	"examples" by ques- tioning.	5 Minutes
1. Education		
2. Park resources		
3. Park themes		
4. What park employees do		
5. Entertainment	Flip chart	
D. Off-site (education, public relations, build public support for NPS and park)		
1. Private community groups		
2. School groups		
3. Other groups (scouts, etc.)		
E. Etc.		
III. Importance of caring for equipment.	Handout Demo	5 Minutes
A. Extend life of equipment		
B. Improve the reliability of equipment	Flip Chart	
C. Improve the quality of the images	w/ sketches of equipment	
Lead in to demonstrations		
IV. Slide programs and sanity. Demonstration of proper use of 35 mm equipment.	Handout on check off Demo	
A. Handout		
1. Carousel--Routine Maintenance	Lecture	20 Minutes
B. Basic difference of slide projectors	Handout examples	

B. Set up and use

1. Power cord - remove all of it (air intake) Demo
2. Height and level controls (explain) lecture
3. Lamp and fan buttons
- a. High/low lamp to meet room light conditions
- b. Fan to cool bulb after use (filament may break if projector moved while bulb hot).
4. Plug in block (remote control, etc.)

C. Lens

1. Insertion and removal (focus knob)
2. Type of lenses and use (most common)
  - a. 3" . . . . . small spaces
  - b. 4-6" zoom . . . variable distances
  - c. 7" . . . . . amphitheaters

Shorter the lens = larger the picture

D. Forward/Reverse Control on the unit v.  
remote control

E. Inserting and removing tray

1. Ring in place #1
  2. Slide lock on tray
  3. Slide selector button

F. Proper loading of a tray (recommend using only  
"80 slide" trays)

- a. Clean, clear slides
- b. Upside down and backwards

G. Trouble shooting and maintenance

1. Changing bulbs
2. Misaligned slide tray
3. Cleaning lens
4. Remote control
5. Removing jammed slides
6. Removing jammed slide tray and realigning tray base

V. Kodak Pageant	Demo lecture
(Demonstrate set up and operation of the newer self threading projectors if available.)	
A. Unpack, set up and identify	
1. Power cord	
2. Speaker cord	
3. Speaker	
4. Arm	
5. Control switches	
B. Threading	
1. Gates	
2. Spokes	
3. Film loop	
4. Floater and sound drum	
C. Sound/Lens/Framer	
1. Proper sequence of operation (Professionalism)	
a. Start the protector then	
b. Turn volume on then	
c. Turn lamp on	
(Film should be pre-set and focused before program to begin on actual footage, not the countdown)	
D. Rewinding the film	
1. Raising Arm	
2. Reverse switch	
E. Trouble shooting and maintenance	
1. Replace projector bulb	
2. Replace exciter light	
3. Clean and remove gate	
4. Cleaning and removing film gate	
5. Cleaning lens	
6. Quick reset button	
F. Splicing film	Demo
VI. Set up and break down of portable projection screen	Demo lecture

VII. Video Cassette Recorder/Player and monitors	Demo lecture	
A. VCR set up and use <ul style="list-style-type: none"> <li>1. Play, stop, pause, and record controls</li> <li>2. Inserting and ejecting cassettes</li> <li>3. Connections to monitors <ul style="list-style-type: none"> <li>a. Types of connectors</li> <li>b. Locations for connector cord hook ups</li> </ul> </li> </ul>		
B. Monitor set up and use. <ul style="list-style-type: none"> <li>1. Controls (on/off, volume, contrast, color, etc.)</li> <li>2. VTR, RGB, TV Button <ul style="list-style-type: none"> <li>a. VTR = video tape recorder. If this button is on any other setting nothing from the VCR player will appear on the screen.</li> <li>b. RGB is for when the monitor is being used with a computer</li> <li>c. TV is for use as a television</li> </ul> </li> </ul>		
VII. AV Survival Kit (Maintenance and cleaning kit)	Demo	5 Minutes
A. Pass out handout and discuss contents and applications.		
B. Mention problem with equipment failing in the field.		
VII. Introduction of other basic equipment used in NPS.	Lecture Demo	10 Minutes
A. LaBelle Playmatic		
B. Dissolve unit		
C. Cassette deck		
D. Amplifier		
E. Microphones		
VIII. Explain practice session to follow lectures		
IX. Summary		
A. Types of equipment	Lecture	5 Minutes
B. Highlights of each piece, i.e., inserting a tray, threading, trouble shooting		
C. Needs of AV in NPS		
D. Questions and Answers		5 Minutes