AN INTRODUCTION TO THE AUDIOVISUAL SELF-ASSESSMENT PROGRAM AT THE UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

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ABSTRACT

The University of Illinois Library at Urbana-Champaign, with funding from the Institute of Museum and Library Services, Washington, D.C., is building an assessment tool for audiovisual materials (film, video, and audio) called the Audiovisual Self-Assessment Program, or AvSAP. AvSAP will assist cultural heritage institutions with audiovisual materials in their collections and staff who have little to no training in audiovisual preservation. Our goal is to help collections managers develop a prioritized preservation plan. With this session we would like to describe the genesis of the project, how we went about designing and testing the tool, and how the tool works from the user's perspective. The program gives tips (many of which are low- to no-cost) about audiovisual preservation throughout the program and is both an assessment tool and an educational tool. This session will not just describe the workings of the tool but will also discuss the evolution of the project itself, including the technologies used to collate research and design and test the tool. The attendees will not only learn how to use AvSAP but also how a three-year project of this magnitude was managed. More information about the AvSAP project, its partners and its timeline can be found at www.library.uiuc.edu/prescons/services/ av_self_assesment_program.html.

INTRODUCTION

In 2005, a group of preservation professionals from around the University of Illinois at Urbana-Champaign campus began meeting to discuss common preservation concerns and challenges across their various campus units. Membership in this group, now called the Preservation Working Group (PWG), consisted of the University Library and Archives; WILL AM/FM/TV (the local public broadcasting member stations); the Spurlock Museum (a world heritage museum); the Krannert Art Museum and Kinkead Pavilion; and the Krannert Center for Performing Arts (all part of the University of Illinois at Urbana-Champaign). Although there were many common concerns among the group, the most prevalently shared concern was the preservation of our physical audiovisual materials.

From this shared concern, the PWG had the idea to create a tool that would help collections managers at institutions assess and prioritize their audiovisual materials by preservation need. From this seed of an idea in 2005, the Audiovisual Self Assessment Program (AvSAP) idea was born and through generous funding through the Institute for Museum and Library Services (IMLS), the tool is now a reality.

PROJECT OVERVIEW

The PWG sought funding for the development of the AvSAP through an IMLS National Leadership Grant. Although the first application for this grant was turned down, the project was refocused and resubmitted in 2006 and was successful. The grant began in May of 2007 with the hiring of a Project Manager and continued for three years. The first year was devoted exclusively to research into the history of audiovisual (AV) materials, their preservation needs, and attendant issues like copyright, ownership, digitization, and reformatting. The second year was devoted to content, design, and the start of programming. The third year was devoted to programming, testing, publicity, and the release of the assessment tool.

DEVELOPMENT

Although the assessment tool is the final and main product of the grant project, during the research and

development stages, a wiki was created as a workspace for pulling together citations, draft questions, identifications keys, and user manual etc. Although not a polished document, the wiki is a great resource of collected data and is viewable by the public at https://wiki.cites.uiuc .edu/wiki/display/AVSAP/AVSAP+Home+Page.

Several other web resources served as models for the design of the AvSAP. Although there were many influences, perhaps the two most referenced websites were the Texas Commission on the Arts' Videotape Identification and Assessment Guide and dPlan, from the Northeast Document Conservation Center, Andover, Massachusetts. The Videotape Identification and Assessment Guide (www.arts.state.tx.us/video), designed by Mona Jimenez, Moving Image Archiving and Preservation, New York University, provides an excellent interface to help users identify physical media, and she was kind enough to allow us to use many of the images of the video formats in our tool as well. In addition, dPlan (www.dplan.org) served as an inspiration for user interface design and overall operability.

In addition, during the second year of the project the project manager and director began discussions with the people who designed the Archon archival description tool, also from the University of Illinois (www.archon.org), and agreed that there would be many benefits to merging our two projects. In the course of these conversations, it was discovered that the Archon PHP programming architecture could be adapted to our purposes and programming for the AvSAP was henceforth based off the existing Archon framework and developed as a package within Archon itself. The program was also made available on the web that runs on the Archon framework, but offers only limited functionality beyond the AvSAP tool itself. This way the tool is available as both a downloadable package with Archon that can be managed locally from a SQL server and is also available on the web for those who cannot support running a SQL application, requiring instead only a current web browser and an internet connection.

For those familiar with Archon, the AvSAP is also being considered for inclusion in the upcoming Archivesspace project (http://archivesspace.org), which will bring together both Archon and the Archivists Toolkit.

OVERVIEW OF THE AVSAP

The AvSAP is an assessment tool specifically for legacy analog audiovisual formats, including motion picture film and magnetic and grooved media. What makes the AvSAP different from other assessment tools available is that it is also intended as a learning device. From its inception, although experts can certainly use the AvSAP, the tool was really designed to be used by collections professionals with little to no audiovisual training or experience, and specifically those working in smaller institutions with small, varied collections. As users utilize the program to do their assessments and access the AvSAP help screens to answer the questions, users learn more about audiovisual preservation, making future assessments go more quickly and giving the user more knowledge about the preservation of their collections.

Because of the nature of the audience for which the AvSAP is intended, it has been designed keeping ease of use in mind. The program provides four basic components: the Institutions Manager, the Collections Manager, the Storage Facilities Manager, and the Assessments Manager, as well as a final Assessment Report. These four components share some information to auto-populate fields, thus reducing the amount of data entry for individual items related to their storage environment, etc. It is recommended that users approach entering data into the AvSAP in the following manner:

1. Institutions Manager. This section provides users with an overview of their institution's "audiovisual savvines" and asks large, institutional level ques-

Assess	ments Manager - test 1 (ID: 26) 7	
-l- New	Save Delete OCancel Glossary Bibliography	٩
Browse	General Related Collection? Use Information? Storage Information?	Condition ² Score ²
0 I	Is the tape itself suffering from any physical damage (has it been eaten by the playback deck, is it crumpled, etc)?	○ None/Minimal Damage ③ Moderate Damage ○ Severe Damage ○ I Don't Know
0 i	What is the level of mold being exhibited by this item?	○ No Mold ○ Some Mold ○ Lots Of Mold ○ I Don't Know
0 I	Is this item exhibiting signs of sticky shed or any other kind of tape breakdown?	○ Yes ○ No ○ I Don't Know
0 I	Assess the quality of the wind of the tape.	\bigcirc Good, smooth wind \bigcirc Some popped strands \bigcirc Very poor wind, many popped strands and loose tape pack
01	Do you have any documentation about this item that might give you any more information about its condition?	○ Yes ○ No ○ I Don't Know
0 I	Is there any squealing during playback?	○ Yes ○ No ○ I Don't Know
0 I	Have you or a member of your staff played back this item in the past two years?	○ Yes ○ No ○ I Don't Know
0 i	Is this item exhibiting signs of damage from exposure to pests (mice, insects)?	○ Yes ○ No ○ I Don't Know

Fig. 1. The first screen of the Assessments Manager.

tions. This section is meant to gauge institutional policy and procedures and provides a score that is independent of the final assessment report.

- 2. Collections Manager. This section asks questions regarding the individual collections that contain AV materials, such as in an archive. If an institution does not have materials stored in discrete "collections," users may create one large collection that encompasses the entire institution.
- 3. Storage Facilities Manager. This step leads the user though questions relevant to each individual storage space in which AV materials are stored, and includes questions on temperature and relative humidity as well as how the item was stored.
- 4. Assessments Manager. This last step links to information entered in the Collections Manager and the Storage Facilities Manager and leads the user through the assessment of individual audiovisual items, asking questions about format, condition, and

previous damage. See figure 1 for a screenshot of a typical assessments manager screen.

THE AVSAP AS AN EDUCATIONAL TOOL

Audiovisual items can be difficult to identify, even for experts. A user may not know exactly what they have at hand as they start the assessment in the Assessments Manager component. To help solve this common problem, AvSAP provides a visual and descriptive guide to AV formats for comparison with items in your collection. To launch this graphic Audiovisual Formats interface, users just click on the "i" button to the left of the Format question in each item-level assessment in the Assessments Manager. This will launch a new web browser window that can be left open and referred to during future item assessments. The Audiovisual Formats interface uses photographs and detailed descriptions to assist users in identifying the particular type of material they have in front of them. See figure 2 to view an example of the

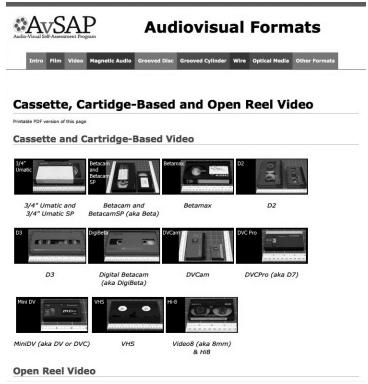


Fig. 2. The Audiovisual Formats Selector guide for cassette and cartridge based video.

Assessi	ments Manager - test 1 (ID: 26) ?					
4 New	Save Delete @Cancel Glossary Bibliograph	۹.				
Browse	General Related Collection? Use Information?	Storage Information? Condition? Score?				
0	Repository	c				
0	What is the name of the item? test 1					
0 I	What is the format of this item?	Video Cassette 1 3/4" Umatic and 3/4" Umatic SP 1	AvSAP the level of significat this item to your repository AvSAP recognizes that you want to differentiate betwee			
0	Which of your previously-assessed storage areas houses this	items of high significance ar lesser significance when apportioning funds for preservation. Choosing the of significance here will not				
0 I	What is the significance of this item to your repository?					
0	Notes		affect your preservation assessment score but can a you to order your decision I significance level.			
			<u>Click through</u> to see what w mean by significance and to tips on determining the significance of an item to yo			

Fig. 3. Primary level help.

Audiovisual Formats selector for video tape. This portion of the AvSAP can also be downloaded as a PDF for future reference. For certain types of materials, users may also be asked to identify the base material of a particular format. The Audiovisual Formats selector page also gives guidance on identification of base materials for those formats (e.g., film, grooved discs, and grooved cylinders) for which base composition may vary from item to item.

Additionally, for every question in any section of the AvSAP, if a user isn't clear what the question is asking, they can click on the question's Help icon (a small blue question mark) located to the left of the question. This will open a box on the same screen, to the right of the question that contains information explaining what kind of information the question is trying to obtain. See figure 3 for an example of this primary level help screen. If desired, this Basic Help text can be turned on for every question simply by clicking on the arrow next to the "i" icon at the top right of the screen—this will activate the help text for whatever question a user is currently typing in. To close this help screen, simply click on the arrow again.

The AvSAP also provides popup windows called Information Kiosks throughout the assessment program. These information kiosks can be accessed by clicking on the "i" symbol to the left of each assessment question in the Institutions, Storage Facilities, and Assessments Managers, or by clicking on the hyperlinks for "more information" located in any open basic help text. These kiosks give users help in answering the content of the question. For example, if a user wanted to answer a question about the level of vinegar syndrome that a 16 mm film was suffering from, but did not know what cellulose diacetate decay was nor how to assess it, they would click on the "i" symbol next to the question for a kiosk that would explain what vinegar syndrome is, what causes it, and how to assess its level in a motion picture film (as illustrated in figure 4). Many kiosks also provide photographs

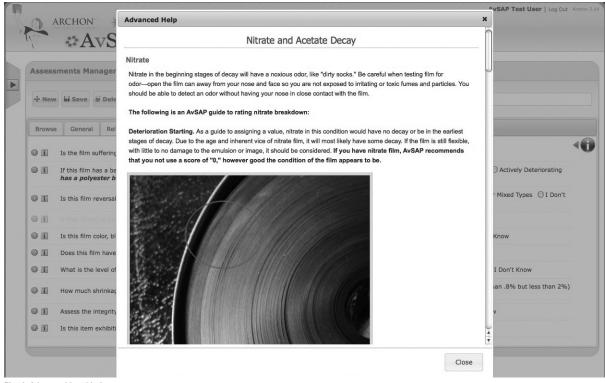


Fig. 4. Advanced level help.

or illustration to further help the user understand the concepts underpinning the question.

ASSESSING SIGNIFICANCE TO COLLECTIONS

AvSAP focuses mainly on the physical condition of the items being assessed, but no assessment can be complete without acknowledging the significance of an item to the repository. During the item-level assessment, AvSAP asks users to rate the significance of each item. This rating does not affect the final assessment score, but serves to flag items that have high significance. The collections manager can then consider the significance of items when using the AvSAP preservation assessment report. For example, a collections manager may decide to focus preservation efforts on an item high in significance even though it scores low on the AvSAP assessment report. The information kiosk for this question provides several methods of assessing significance to help you generate a useful answer.

THE ASSESSMENT REPORT

At the end of an assessment, the AvSAP will generate an itemized assessment report. This decision list shows the user a list of assessed items, ranked by priority of their identified preservation needs (see figure 5). Many factors go into generating an item's ranking (scored from 1-100). This includes the physical condition of the item; the format of the item; the conditions of the environment in which the item has been stored; and the container (or lack thereof) of the item. Many questions in the storage environment and item-level assessment sections have weights that affect the final score (and thus the ranking) of an item. Therefore, the more questions user answers about an item, the more diagnostic the item's score will be, although "I don't know" is an option for many questions.

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Assessment	Report ?						
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	test 5	Archives Research Center	7.34	Wire Audio	Low		
	test 2	attic	15.44	35mm	Medium		
	test 1	Archives Research Center	27.95	3/4" Umatic and 3/4" Umatic SP			
	test	Archives Research Center	32.97	Super 8			
Conservation Lab	Family Recordings	Ben's test	36.53	Betamax	Medium		
	Stars and Stripes Forever Sound Recording	Archives Research Center	40.27	Grooved Cylinder Audio	High	Unique recording conducted by Sousa in 1910 before his World Tour. Recording utilized Baroque ripeano and concertino performance technique	
	Where the River	Ben's test	41.15	Grooved Cylinder Audio	Medium		
Conservation Lab	Shannon Flows						
	Shannon Flows 1962 presidential lecture	Archives Research Center	44.13	1" open reel	High		

Fig. 5. The final assessment report.

Preservation scores are based on information provided by the user as well as values based on the identified format and its known obsolescence. To be specific, final scores are evaluated by the following calculation:

Environment Conditions (70%) + Disaster Preparedness (30%) = Environment

then

Format (40%) + Environment (10%) + Container (5%) + Use/Access (5%) + Condition (40%) = AvSAP Score.

The assessment report can be viewed and manipulated by sorting and sub-sorting columns within the AvSAP tool, but can also be downloaded as comma separated text, which can easily be imported into Microsoft Excel or other spreadsheet programs for further manipulation and retrieval.

FOR MORE INFORMATION

The AvSAP is due to be released to the public shortly. For more information on the project and to access the tool when it is released, please visit the project website at www.library.illinois.edu/prescons/avsap.

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