WORKING WITH FILM AND VIDEO

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Working with Film and Video at the Alaska Film Archives, University of Alaska Fairbanks – March 2016
The Alaska Film Archives was founded as a unit of the Alaska and Polar Regions Collections & Archives (APRCA) at the University of Alaska Fairbanks in 1993.

Roots of the collection go back to the 1960s, when managers of the university's media library first began to realize the fragility of moving images on film. These early media managers developed a vision: to document and acquire all known films about Alaska, to fully catalog films, to provide the specialized care that films required, and to provide the public with access to historical moving images about Alaska.
Today not much has changed. Our goals continue to be: acquire, preserve through specialized care, catalog, and provide access.

Collection now includes approximately 12,000 unique holdings on film and video, with all materials related to Alaska. Most materials are cataloged, either fully or in brief, with records accessible through the university library's online library catalog.

Collection is utilized by researchers, historians, students, general members of the public, and documentary filmmakers (both non-profit and commercial).

Since 2003, the film archives has maintained two climate controlled vaults within the Rasmuson Library at UAF. Film vault = 40F and 30%RH. Magnetic Media (Video) Vault = 50F and 30%RH.
Like the media managers of the 1960s, we’re rediscovering that our films and videos will not last forever, despite the specialized care they have received over the past half century. This is especially true for videotapes - the machines used to play them back will not be available or repairable for very much longer. We are already running on borrowed time for many media formats.

Our goals don’t change, but the tools we use to accomplish our goals are constantly changing.

The film archives once relied on migration/duplication of analog materials for preservation across time. Old film to new film. Old video formats to new video formats. But today, film is very expensive and no new videotape is being produced. There is a need now to consider preservation through digital means. Certainly digitization is necessary for access.

In today’s digital age, patrons and researchers no longer want to check out viewing copies of materials on DVD. They no longer have the patience to use interlibrary loan services to obtain DVD viewing copies. They want immediate access to archival moving images via the internet.
### Traditional
- Evaluate for appropriateness
- Obtain Certificate of Gift
- Make notes about format/content
- Clean and repair as needed
- Assign unique identifier
- Create library catalog record
- Properly store original
- Make a preservation master
- Make an access copy

### New
- Make PDFs of Certificate of Gift and related donor files
- Photograph original media and containers and make TIFFs or JPEGs
- Make a digital preservation master
- Make a digital access copy
- Create an Archival Informational Packet and store securely (upload to server)

The column on the left describes what we have done in the past and that we are continuing to do at present. Note that we are still making analog preservation and DVD access copies because we still have the equipment in place to do so and a backlog of videotape stock and DVDs to work through. Film to film transfers are expensive, but can still be accomplished by some labs and through the aid of grant-funding.

The column on the right describes the new procedures that we are adding to our workflow. Our digital preservation file format = Apple ProRes 422 mov. Our digital access file format = mp4.

For more information on audiovisual file formats, see “Sustainability of Digital Formats Planning for Library of Congress Collections.” This information may help you when making decisions about what file formats are the best choice for your institution: http://www.digitalpreservation.gov/formats/

We are able to digitize some films and most videotapes in-house, but films in poor condition (and/or films with high value content) are sent to an outside lab that performs high resolution scans and uncompressed AVI files in addition to Apple ProRes HQ mov files.
Traditional workflow
Consider your collection policies before accepting an item into your collection.

1. Evaluate for appropriateness:

Does the item belong in our collection?

“Many Faces of Mexico”

“Jeanie of Alaska”
2. Obtain a Certificate of Gift

Obtain a certificate of gift and gather basic information from the donor.

Gather other relevant information, such as:

Under what conditions have items been stored, and for how long? (garage, attic, office, etc.)

Do you have a personal relationship to the films (are you the filmmaker, or related to the filmmaker, or do you appear in the films, etc.)?

Where and how have you acquired these films? (bought at a flea market, found them abandoned on curb, etc.)

What would you wish for the future of the films?

Refer to:
http://www.centerforhomovies.org/donation-questionnaire/
Collect information about each videotape or film.
4. Clean and repair as needed

Clean and repair materials as needed.
Assign a unique identifier number to each collection item.

At the Alaska Film Archives, we simply assign a unique number to each item. This number is written on the item itself, and on its case or container. The “AAF” stands for Alaska Archival Film.
Once the basic unique identifier information is written on each item and its container, we then add a few more bits of detail.

We have codes for all the various formats in our collection.

The 16 indicates the item is a 16mm film.

The 8S indicates the item is a Super8mm film.

The 75 indicates the item is a ¾” Umatic videotape.

The 75_SP indicates the item was migrated from a ¾” U-Matic to a Betacam SP tape.

The 02_SP_DV indicates the item was migrated from a 2” Quad videotape to a Betacam SP tape and then to a Mini DV tape.

This system makes it easy to glance at an item and immediately know its lineage.
In hindsight, this might have been a better system – so that identifier numbers would exactly match the resulting digital file names once an item has been digitized.

5. Assign unique identifier (In hindsight, this might have been a better route to go – so that identifier numbers would exactly match digital file names)...

AAF00001_16
AAF00002_16
AAF00003_8S
AAF00004_75
AAF02046_75_SP
AAF21032_02_SP_DV
There are many other schemes you might consider for numbering the items in your collection. For instance, you could include the year that the item was accepted into the collection, followed by a unique identifier number. Choose a scheme that best fits your needs. Once a decision has been made about how to number items, stick with it and don’t make changes to the system without some serious consideration! Having a variety of numbering schemes in place can lead to chaos and confusion.
This is what one of our basic catalog records looks like to the public.
This is what one of our basic catalog records looks like to the public. For an unprocessed collection.
7. Properly store original

Barcoded archival container, stored in appropriate environment

We place films on cores and in archival canisters that are barcoded and then placed into storage at 40°F and 30%RH.
In the past, we made preservation masters on Betacam SP, Digibeta or Mini DV videotape. This process is gradually being replaced by producing high quality digital preservation master files.
We are continuing to make DVD access copies at this time.
New Additions to Workflow (For Digital Preservation and Access)

Make PDFs of Certificate of Gift and related donor files.
11. Photograph original media and containers and make TIFFS or JPEGs.

Photograph original media and containers and make TIFFS or JPEGs. We chose JPEGs due to smaller file size, and because this is information peripheral to the archival object (not the archival object itself).
12. Make a DIGITAL preservation master

National Archives:
Preservation master files are created at high to maximum capture specifications and can therefore serve a variety of purposes, including satisfying long-term preservation needs as well as fulfilling most researcher requests for high-quality files. Preservation master files may capture additional information about the original beyond the content itself. Because they are created to high capture standards, preservation master files could take the place of the original record if the original was destroyed, damaged, or not retained. Preservation masters generally do not undergo significant processing or editing.

In house:
Apple ProRes 422 mov
Apple ProRes 422 High Quality mov

Vendor:
Uncompressed AVI
Apple ProRes 422 High Quality mov


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Our access digital files are currently stored on hard drives in archives offices, with access controlled by archivists. Files are made available depending on user needs.
Short clips from collections are posted to our You Tube Channel so that users can browse content. This is just the tip of the iceberg compared to what is available on DVD, however.
The Rasmuson Library at UAF has a basic Digital Preservation Policy in place, and a dedicated full-time Digital Preservation Technician on staff within the IT department.

The film archives creates Archival Information Packets (AIPs) for upload to the library server. Once on the library server, the files fall under the care and management of Library IT, although film archives retains access to the files.
Archival Information Package (AIP) = series of files. Each AIP file has a unique identifier that corresponds with the original media item and the catalog record that is in the library catalog.

The AIP contains: preservation description information (including documentation such as the certificate of gift and photos of original media items, logs containing info about what has been done to the media item and when, and manifests that include checksum information); the preservation file; and the access file or files.

Once this package of files is uploaded to the Library’s server, it falls under the oversight of the library’s Digital Preservation Technician, who oversees the organization, integrity and accessibility of the files.

Above is what an ideal AIP looks like.
14. Create an “Archival Informational Packet” and safely store this file (upload to server)

**ARCHIVAL INFORMATION PACKAGE (AIP) Current reality...**

- AAF-01234 -- 01235_CoG_DonorName.pdf
- AAF-01234_16.mov
- AAF-01234_1.jpg
- AAF-01234_2.jpg
- AAF-01235_8M.mov
- AAF-01236_CoG_DonorName.pdf
- AAF-01236_16.mov

This is what our AIP files look like in reality. Keeping files in one folder (instead of many folders with subfolders) makes sorting and migrating easier to accomplish.
In SUMMARY

- Original film or video with unique identifier number – STORED IN VAULT
- Original Certificate of Gift – STORED IN ARCHIVES FILE CABINET
- Catalog Record – ACCESSIBLE THROUGH ONLINE LIBRARY CATALOG
- Preservation master (analog film or video) – STORED IN VAULT
- Access copy (DVD) – AVAILABLE FOR CHECKOUT AT LIBRARY OR THROUGH INTERLIBRARY LOAN
- Digital preservation master – Part of Archival Information Package (AIP) STORED ON LIBRARY SERVER
- Digital access copy – CURRENTLY STORED ON HARD DRIVES WITH ACCESS CONTROLLED BY ARCHIVISTS – eventually will be stored on library server and bundled along with Archival Information Package (AIP).
- Other digital access – SELECT CLIPS AVAILABLE ON YOU TUBE CHANNEL
- PDF of Certificate of Gift – Part of Archival Information Package (AIP) STORED ON LIBRARY SERVER
- JPEGs of original media and containers – Part of Archival Information Package (AIP) STORED ON LIBRARY SERVER
My mantra.

Digital Preservation is a scary thing because we’re entering new territory. But the need for and reliance on digitizing our materials is a good thing, because we now have the impetus and focus to develop good digitization plans, and to develop good digital preservation policies. As we transition slowly and carefully to digital preservation and access, we continue to implement many of our traditional practices that have served us well over many years.
A few sites and publications that have served us well. These are just a few of many that we often refer to for guidance and support.